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<p>(21) International Application Number: PCT/US98/06956 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/837,312 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BY, CA, CH, CN, CU, CZ, DE, DK, EE, EG, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, LC, LK, LR, LS, LT, LU, LV, MD, MG, M, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, S, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, A, (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eur. patents (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>Without international search report and to be republished upon receipt of that report.</i></p>
<p>(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.</p>		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide
consisting of a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
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 20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
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 NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID
 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32	62	DY307	93	DY611
5	2	BV216	DW1001	63	DY643	94	EC259
	3	BV274	33 DW831	64	DY656	95	DY711
	4	BV48	34 DW859	65	DY675	96	EC248
	5	DN351	35 DW875	66	DY988	97	EC32
	6	DN381	36 DW888	67	DY992	98	DO703
10	7	DN405	37 DW901	68	DY225	99	DO713
	8	DU651	38 DW902	69	DY236	100	DR294
	9	DU660	39 DW904	70	DY242	101	DY1
	10	DU675	40 DW905	71	DY254	102	DY10
	11	DU684	41 DW906	72	DY914	103	DY106
15	12	DD364	42 DW929	73	DY946	104	DY117
	13	DD379	43 DW981	74	DY955	105	DY148
	14	DD389	44 DX191	75	DY959	106	DY167
	15	DD401	45 DX219	76	DY961	107	DY17
	16	DD413	46 DX245	77	DY981	108	DY174
20	17	DD426	47 DX256	78	DY357	109	DY175
	18	DD428	48 DX267	79	DY358	110	DY178
	19	DN293	49 DX66	80	DY381	111	DY23
	20	DD454	50 DX81	81	DY413	112	DY27
	21	DD472	51 DY780	82	DY414	113	DY41
25	22	DD475	52 DY803	83	DY415	114	DY42
	23	DT306	53 DY809	84	DY431	115	DY8
	24	DW282	54 DY814	85	DY433	116	DY93
	25	DW300	55 DY261	86	DY436	117	EB107
	26	DW303	56 DY264	87	DY543	118	EB113
30	27	DW323	57 DY266	88	DY565	119	EB163
	28	DT258	58 DY271	89	DY585	120	EB25
	29	DW246	59 DY287	90	DY331	121	EB77
	30	DW324	60 DY297	91	DY586	122	EC172
	31	DW333	61 DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions, most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, e.g., Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
 5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
 10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-
 15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa
 20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
 25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
 5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
 10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
 20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
 25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
 30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins and are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborget et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

Other Activities

30 A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a
5 composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the
10 invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or complement its activity or
15 use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects
20 of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric
25 or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T
30 lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 ng to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systemically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1 or 2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	Peripheral Blood Mononuclear Cell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	Salivary Gland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	Peripheral Blood Mononuclear Cell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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 - (B) STREET: 87 CambridgePark Drive
 - (C) CITY: Cambridge
 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

GGAGATGTTG AGGTGGCTGC TGACCTTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT      60
CATTGCCGTC CTCTCTAGGC TGTCTTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT      120
ATCCCCGATA CATATTCTGC CTCCTGGTTC TACCTTGTTT TCCTGCACCC TGGTGTCTAG      180
CACCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCTGA CGCCCATAGG      240

```

```

GTCTCCGCAT GTAGTAAGGT GGGAACTTC GCCTGCGGTA GGGCCGCGT TGTGGGCCT 300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTCCCC ACTCTCACTA TTCTGGTAAT 360
TTTGCTGGTA ATTGCGTGA GGAGAACAGG TAGACTCGAG 400

```

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC 60
TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTCTTACGT CAACATTCTT 120
TCCAGGATGA TGAATGGACT GTTCTCTTGG GCCCCTATC TCGAG 165

```

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

```

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAACCTGT TTGCTCCTAA 60
ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTCTTTTG GCTTTCCCTT GCCTTCCCCT 120
TTCTCTGTCT CCAACACTCT TTCCCATGT CTTTCTGGCT GTCTCTATGT TCCTCTTCTC 180
TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCCACC TCCCAGCCC CAGCCCCCTCC 240
CTCCTTGGTC TCCTTTTGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG 299

```

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

```

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTAA 60
ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC 120
TTAATTTTCT AAGATTATGT AAAGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC 180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTTATCT TGCAGCAACG CACATCTCGA 240
G 241

```

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAAGGGTAC	60
TTACATTACG	TGTTTGATTT	GGGAAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAATCAGTG	GCACAACGTG	ATGATATCAA	GGGACACCCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAACG	CAAATCACCG	CCGGAGCCAG	GAACCTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAA	300
CTTGTTACATG	CCAAAGAAGG	CTTTCAAGGC	TGCCTGGCAT	CAGTTGATTT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC	TTCATGGCCT	ATAAAATTTA	AAAATGCTAA	GGATCTGGCC	CCACAGGCCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCCC	ATTGGCCTCC	TAGGTCCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCCTCCGT	TCTCATGCG	GGGCTCCTGA	AGGGGGTATC	180
TGAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCCTTT	TGCTAGCCCC	TGAACCTGT	240
GGTGGAGTCT	GGCTGATGCG	CAGGGCCATG	TCCTAGAGGG	GACTCCCTCG	CAGGAGGCGG	300
GCTCTAAAGG	GAGTGGTGTC	CCTTTAGGCC	AGGGTTTACA	GTCGGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGCACCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACTT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTTTA	120
AAAAATTGCC	AGGTGTGGTC	GTGTGTGCCT	GTGAGGCTGA	GGTGGGAGGC	TGCCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	TAAAACAAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTTA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAGAAT CTGACACTGG CCTGGCCCCA      240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTGCGAGG ACCCACTCGA G      351

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTGATGTGTC ACCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAA TGAAGTCCCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGT TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCTC      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCGG TGAAGAATT TGAGCTGTGC      300
CTTCCCGACG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCTAACT CGAG      354

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCCCACG CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCAC GAAGAAAAA GCCTGGTTTT GTTTTCCCA GAATATCGAT GGAATAAAA      240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTTATTC TGACATTCTT AAAATAGATT      300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTCAT TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG      420
TCTCTCCTCG AG      432

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCTTTT TTTGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTITGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTT GGGTCTTTT TGAATGTCCA TGAAGGTCTT      360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTGTCTCTT      480
GTGGTTCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

```

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTA CTCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA      240
TTTCCACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTTGAA AATTCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTITGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAAA TTATATATAT ATTCTCCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC      240

```

ACATACCACA GGTCTCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG 300
 GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTATT 360
 ATTAACAAC AGGCTCGAG 379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT 60
 AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA 120
 GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA 180
 GAACAGATGT CCCGTGGTGA TCCATTAAAG GATATAATTT TATATGTCTA GGAGGAGATG 240
 AAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAAATGAGC 300
 ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG 360
 CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA 420
 CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCAATTCA TGAAGCCCTT CCAGAAAATA 480
 GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG 528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCACAC TGGTGAGCAG 60
 GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTACTCTT TGCTAAATAA AAGTGGGAGT 120
 GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CTTGCCTGCT 180
 CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGAC GGTGTTGAAC 240
 TGGGACACTG GGGAGAAAGG GGCTTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT 300
 GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC 360
 CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCTCTCG 420
 AAAGAATTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GAATTCGGCC TTCATGGCCT AGCGTGATCC TGGAACTGTC TCTAGTTCGA GAGAGTGAGG      60
GCTTTGAGGA GCATGTACCA TCTGATAACT CTTGAAGATA CAGAGAGAAA TCCATCTTTT      120
CCCAGGTCTC CTTCACTGAA AACAAAAATC TACTTACATA CACTGTCACC TTAGCATCAG      180
AGTCGGATTA ATGAACTGCG GAACAAGAGG TTGTGAGAAT CTAAGATGGA ACCTTTCTTT      240
CTTCTCTTCT TTTTTTTTAA ATTTGTATT TTCCATCCAA CACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AGGGCTCTGC TTATAAACTT CAAAGTTACA CTGAAGGATA      60
CGGTAAAAAC ACCAGTTTAG TAACCATTTT TATGATTGGG AATACCATGA TGGGAACATC      120
TATACTAAGC ATTCCTTGGG GCATAAAACA GGCTGGATT TACTACTGGAA TGTGTGTCAT      180
CATACTGATG GGCCTTTTAA CACTTTATTG CTGCTACAGA GTAGTGAAAT CACGGACTAT      240
GATGTTTTCA TTGATACCA CTACCTGGGA ATATCCAGAT GTCTGCAGAC ATTATTTCGG      300
CTCCTTGGG CAGTGGTCGA GTCTCTCTT CTCCTTGGTG TCTCTCATTG GAGCAATGAT      360
AGTTTATTGG GTGCTTATGT CAAATTTTCT TTTTAATACT GGAAAGTTTA TTTTAAATTT      420
TATTCATCAC ATTAATGACA CAGACACTAT ACTGAGTACC AATAATAGCA ACCCTGGTCT      480
CGAG      484

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTGGCCT TCATGGCCTA GGAGATATAC CTAATGCTAG ATGATGAGTT AGTGGGTGCA      60
GCGCACCAGC GTGGCACATG TATACATATG TAACTAACCT GCACAATGTG CACATGTACC      120
CTAAACTTAA AAGTATATAT AAAAAAAAAA GACNTCGCTA GTGAGCACGC TGTATACGAC      180
ATCGCTAATG AGGACACCAT ACAAGGCATC GCTAACGATG ACGCTGTACA CAACATCACT      240
AATGATGACA CCGTATAAGA CATCGCTAAT TATGACGCTG TATACGACAT CGCTAATGAC      300
ACCGTACGAG GCACGCTAAC AAGGATGCTG TACACAACAT CGCTAATGAG GACAGTGTAC      360
AAGCCATCGC TAATGAGGAC ACTGTATATG ACATTGCTAA CGAGGACACT GTACAAGGCA      420
TTGCTAACGA GGACGCTGTA CACAACATCG CTAATGACAC CATATAAGAC ATCACCAATG      480
AGGATGCTGT ATATGACATC GCTAATAACA CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GCAGCTCTCA TCCTCGTCTC CCCAACACCA TAACGTCTCTC ATCCCGCTCTC CAACCCACAC      60
CAGGCCGAAG CCCTCAGAGA GTGTTTTCAT CAGGAACCAC TCTCGAACCT GAAGGTTGAC      120
TTTAGCGTTT AGCAACCCAG GCGGTGTGTG GTGTTTCCCG TTTTGTTCCT TGAGTGGTAG      180
CAGTGATCAC CGTAATTCCA TGAGCCATG TGCTAGCAGA ACCCTGTGT CCTCACCGTG      240
GCCCCTGTGA CCCAGCCGA CGAGTGCCG GCGGAGTCCC CGCTGCCTTC CCATGGTCCA      300
GTGAGCTGCC AGGGCATCAC ATGACTCTCA GCTGGGCTCG AG                          342

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GAATTCGGCC TTCATGGCCT AGAGCAGCTC TGAGGTAGAA ATTACAACGA TGAAGAGAGC      60
ACAACGTACA AAACCAAGAA AGAGTCTGTT GTGTGAAGGG TCATTTCGATG AAGAAGCTTC      120
TGCACAGTCC TTTCAGGAAG TGTTAAGTCA ATGGAGAACC GGAAATCATG ATGACAACAA      180
GAAACAGAAT TTACATGCAG CAGTAAAAGA CTCATTGGAA GAATGCGAAG TACAGACTAA      240
TCTGAAAATT TGGAGAGAAC CACTTAATAT TGAACCTAAA GAAGACATTC TATCCTATAT      300
GGAAAAATTA TGGCTTAAAA AACACAGGAG AACTCCACAA GAGCAACTTT TTAAGATGCT      360
ACCAGATACG TTCCACATC CACATGAAAC CACTGGTGAT GCACAGTGTT CTCAAATGA      420
AAACGATGAA GATAGTGATG GTGAGGAGAC CAAAGTACAA CACACAGCTC TTTTATTGCC      480
AGTAGAAACA TTAACATAG AGAGACCTGA ACCATCTCTA AAGATAGTCG AACTGGATGA      540
TACTTATGAA GAGGAATTG AAGAAGCAGA ACATCTCGAG                          580

```

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

```

GAATTCGGCC TTCATGGCCT AGAAGATCT AATTATCATG GACCTGCGAC AGTTTCTTAT      60
GTGCCTGTCC CTGTGCACAG CCTTTGCCTT GAGCAAACCC ACAGAAAAGA AGGACCGTGT      120
ACATCATGAG CCTCAGCTCA GTGACAAGGT TCACAATGAT GCTCAGAGTT TTGATTATGA      180
CCATGATGCC TTCTTGGGTG CTGAAGAAGC AAAGACCTTT GATCAGTTGA CACCAGAAGA      240
GAGCAAGGAA AGGTTTGGAA AGATTGTAAG TAAATAGAT GCGACAAGG ATCGGCTCGA      300
G                                                                    301

```

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAAC TCCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCTATCC TCCAGCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTTAAT    180
CCTTCAGAAA ATTCATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG    300
CACAACTCTGA GGATTTAGGG ATGAAGCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```

GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAGA GAAGGCTATT ATTAACATTG GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCAATTAT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGAGAGAA AGTTACCTCC TGCCTCGAG    239

```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTIATTTT GTAAAGCATC TTTTCTTCAA    60
TTCTTGTGG CATTCTGGGC CAAAATATTT CAGGTTGGTT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTT AGTGAGAGAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTGCAATG GTCTCGAG    238

```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60

```

ACTGAACAAA ATATTTTCAA AGACATTGT CATTCCTTAA AGCCAAGATT TTAAAGACTA 120
 ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG 180
 TCTGATAAAT TTTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G 231

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCGA 60
 ATTGTCTGTG TCATTTCTTC ATCTGCTTCT ACTGATTTT TCTGCTTCTG TTTACTCTTC 120
 ATTTTGGACC TATTTTCCCT TATTGGTGC TTTGCATACA ATTTGTTGGG ACTGGATCTT 180
 TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC 240
 AATCAGAAAC AATTTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC 300
 TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC 60
 TTCAGTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC 120
 AGGCTGCAGC CAATCTTCAA GTGGCATACA GGCCAAACAT CCATTTATAA TATGGTTGGA 180
 ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA 240
 CGCAACTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT 60
 TCTCCTCGCT CCATTCTGTC CACATTTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC 120
 TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA 180
 CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAACTATAT 240
 GATGCCAGCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGACT AAGCAGACTA GGAAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C                                     211

```

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT      60
TTGTTTTGAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTGATGAG      120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATT TCGTTCATT TGGTTCTCAG      240
GGTTTGTTAT AATTTTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAG GTCAATGGAG GTGGAGTACAC      420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCAGTGA GGTGGGGCAC      480
AGAGACTACA GGTCAGTGA GGTGGAGCAC AGAGACCACA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC TTCATGGCCT AAAATTTCTT CTAAGTACTG ATTTAGCTGC ATTGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCTTTGTC AATTTTTTTT      120
TCAGGAATTC GGGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCAGAGCTC      180
ACTATAAACT CAAACTCCTG GGCTCAAGCA ACCCTCCCAC CTCCTCACTC CCCTCGAC      238

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

GGTTTCTTAA	AAAAAAAAAA	AAAAGGAATT	TGATCCAGAG	CAATTTTCT	CAATTAAAT	60
TTGTGATTAC	ATTCTGAGT	TTCCATGGCA	GAGTTGTGAG	TGGGGCTGTG	ATATAATTTA	120
ACTTCTCCTA	AATTGCTGAC	ACCGATAACC	CTATAAATTA	ACAGATGGCG	GAGGGAAATC	180
TCCTGGCTTC	TTCTGGCTA	GTTTTTTT	ATGGTCTGAT	TTTGTAAATA	GGGGTTTGA	240
GTCCCAGCCG	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GAATTCGGCC	TTCATGGCCT	AAAGACTTAC	GTTATATTTT	CATATACTCC	TTCCCACTCT	60
TAGTGTGTTG	TCAATATACA	TTTTGTTT	CATGTAAAAA	CACCACAGTA	TATTGTTCTT	120
AATTTTGCTT	TTAATAGTAA	ACTGTCTTAT	AACAAATTAT	GAAAATGGAA	AAAAACATGT	180
CTTTCTTATT	TGCCCTCATA	TTTATCCATT	TAGGCACTCT	TCCTTTTCC	CTTTCATTCC	240
AGTTTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GAATTCGGCC	TTCATGGCCT	ACTAACATTT	ATGAAAATTA	TTTGTAATA	AAATAAGAGG	60
CATTGAGATT	AAAATTGGAG	ATAAAGTTGC	TGATGTGTTG	TTTTCCTGAA	GTATTTTTTT	120
TCTTAATTCT	GATCTTTGTT	TCCCAATACA	ATCACACTCA	CACCCTTGCA	GTTCAAGTTT	180
CTGACGACTC	TCTAGTGTGC	CAGATCTGTG	TTTCTATGTC	AGTGATCTGT	TCCCCATCTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTTG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCAGG GTTTCATTTC      240
ATTCCCATTG AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAAACCAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGTCTC GAG                                         383
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG      60
GACCTGGTAC CTCTTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                         133
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGATGAT TGTATCTTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCAAT AATTCAAGCT GCATTTCAGA      240
GAAAACCAGG ACTTTGAAT CAGACAGCAA CTCGAG                                         276
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCCT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGTG AGAACCCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCCGCCCA CTCGA                                385

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCACCTTT      60
GGTTTTCTTA TCTATAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTTACTTT ACATTACTA AGCACCCAGA      180
AAATGTTAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTTCA AGGAGGGCGC      240
TCGAG                                245

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAACTCT TTCCCAATTC AGTCGCTACT TTTACTTCTG CCCTTTCTAT      120

```

CCATCGTCTT CATTTTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTAT 180
 TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA 240
 TCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA 60
 TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG 106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTC AAGTGATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT 60
 TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTTGAT CCTGTAAGTT 120
 TTGGCATCTT AAGTGGAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA 180
 TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG 237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG 60
 TGTGTCTGTG CATTTATTTG GATCATGGAA GGTTGTAGAT GTGTATTTCT AACTGTAGAT 120
 AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG 180
 TGGTATTTCT CTATGTTTTG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC 240
 TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT 300
 GTTATGTGTC CTCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA 360
 TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC 420
 ATGGCATTTC TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG      60
CTCTGTTTGT GGGGCCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC      120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCCTT CTACCCCTCAG GAGGTCTGCT      180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGGTTT      240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT      300
TTTAACTACT CTGCAGCAGC AGCAACAGCA GCTCTCCCAG TTTACACCAC AACTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT      60
CCAGGGATAA AGCAACTGCT TGGTTTGAG GCGTCCTCT GCGCTGCTGA GCCATCAGCC      120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCTCTCTA CATAGGGTTC      180
TGTCATCACT GAGTCTCACC ATTTCCCTCT CCCCAGTGTC TTTATTATGT GACACACACA      240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTCATT      300
CTGTGTTTTG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG          353

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT      60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA      120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT      180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTATATAC GTGTAAGAGA AAAAATCGGG      240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTCAC CAGAGGCCCC CTAGATGCAA      300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC      360
CCGTCAACCG TCAGTGCAGC AGTGGGCTGG GTGCTTGCGT CCCACAGTGA GGAAGGCAGA      420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG          456

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTGGAAG CACACACAGG CTTCCCCGCA CTCCTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTATTAT TAACATGATT TTTCTATATC      360
GTTACTGTCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTTGTATTTA      420
TGTTCCTTTT TGGTGGATTC TTAATGACCC TTTTGGTCT GTTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG                                     509

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTCGCCTCTT      120
GGGCTCAAGT GATTCCTCCA TCCCCCACCC CCCTTCTCAC CCCAGATTG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGGT TTTGCCGTTG CCCAAGCTGA TCTCGAATC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTTT AAGTTTCTAT      300
GCTGTTTAAT TTTTTTTAAC TGATTAATTT ATTTGCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTTGGTGA GTCTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GAATTCGGCC TTCATGGCAG AGTGGAAGGG GTTGTAATAA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG                                     168

```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

```
GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT    60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT    120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC    180
TTTCAAAAAT GTTATTTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG    228
```

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

```
GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG    60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTGACTTCT AGGGCAGTAC AAATTCAAGC    120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC    180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCTCCC TACTACCAAT CCTGTCCCGG    240
TCTCGAG    247
```

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```
GGCCAAAACA AAGCTTATAA AGGTCCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT    60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTGCCCCAAG GATGGACTCG    120
AAATGAACTA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC    180
CATCACCGGA GCTTTTGTAA TTGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG    235
```

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT      60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT      120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATTGTACTC      180
AAGTCTATGA TCTTTTACC ATTCTTGTA CAAAGGATTT TCACTGGCTG G                231

```

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTACTGAATT TCAGGAAATG      60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC      120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCTT GTTTTCAAA ATTGATGCTT      180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACAACT CATGCTTCAA TCCTTGATAG      240
AGCAAACTC AGAACAGGT ATGTAAAAAT ATAGTCTGGC TTTAGAATT GTTAATTCAC      300
CTGCTTTGCC ACAGAAAATG GAGACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```

GAATTCTAGA CCGCCTCGA GATCTGAACT ATAATCTTTT CCATTCTATC TAGTCCCAT      60
CCTAAGTCCT CTCCTCCTAA CGTGGAATC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC      120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT      180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCAGCG CTCCTCGAG                230

```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCGGCC TTCATGGCCT AAAGGGAAG TGGGAATATA CACAATGCAN AACTAGCCA      60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA      120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG      180

```

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC      240
TCTTAAAAAT GTCATGTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTTT      300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT      360
CACATCCCTG CAACAAACAT GTTCTTTCCT TTCTGCATAG CCTTCCATTT CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTT CTAATGAATA AAAATCAAGT      60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA      120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAAA ACTAATCCAC CACTTATCCA      180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT      240
AACTGAAACT GTTGTGACTG AATATCTAAA TAGTGGAAG TCACTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT AATTTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG      60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCAGG GAAAAGACAT AGGACCTCTG      120
ACTCTAACTG AGGTTCTGGA TTATTATGAG AGATTTTCAG AAATGGTCTA ATGGTGTGG      180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCATGAGA TTCCCCCATA      240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT      300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTTTGTATGG      360
TAAGAAAGCT TTAATCCTCG AG      382

```

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

AAAAAAAAC CAAACCCTAT TATTTTATTG ACAGATTGTC TTAGAGTTGA TAGCATTAA      60
TAATTGAGTA AGTACAGTCC TTCCTTGTTT CCAACGTGCC CTATTTTTC TTTCTTCTCT      120
ACTTTTGAT ATGCATTTTC CCTCTTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTC      180
TCAAAATCAC CTCGAG      196

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTCTAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TGCCTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCTG TAACAAGTTT ATGCAGAAC TTCCATATCT      240
CTCATAAAAC CAGAGCATTC ATAGAACCAG AAACCTCTCGA G                      281

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC TTCATGGCCT AAAAGATTG AGCATTTCAA AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTAA TCATTAAAGT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCTGTAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAGAC TCCATNTCAA GGAAAAAAA AAAGAAAAAT ATATATATGA ACTTCAGAA      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCTCGAG                      400

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAAACCATAG TGGCAGATT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTTGGTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATTGAACT TTTCTCTATA TTTTCCTTC CCCCATGCAA ACTTTTGAT      180
TGTTTTTCTG AAATCATAAT TCATTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA    60
AAAGAAAGAA TTAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA    120
ATCCAAAGAC AAAAGTCAGA TGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA    180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT    240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG    300
TTCTCTCTCA TTCTTGTCGG AAAGTTGCCA TGAGGATCCC TCTGTTTCCC CCAAACTCGA    360
G                                     361
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTCAAGAC    60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCACCTCT CCCTTTTCTC    120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG    180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAATA AAGCTGTGCA GCTGCCTCTT    240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT    300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA    360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG                                     393
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```
GAATTCGGCC TTCATGGCCT AATTGTTTAT TGCTAGAAAA TACACAGTTT TGAGATTTT    60
GGGCATAATT GGCCTTAGTG TGTCATTCT GCATTAAAT ATAGGTTAAT AATCAGATGA    120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTTGTTA ATGTTTTTAA    180
TTGTATTTT TCTGCTTATA AATTGTCTT TAAATCACTC CCTCCTTCC CGCCCCCGG    240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCAA CTCCTTCTCC CTCCTTCCC GCGCGCGAC    300
TCCTTCTCCC TCCTTCCCGC CCCCCGATCC TCGAG                                     335
```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT    60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT    120
TGGGTTTTTT TTTTCCTTT TTTTITTTAA GAGTATAAGG TTTACACAAT CATTCTCATA    180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG        235
```

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT    60
AACACCCCAA AGGCTACCTT TCCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC    120
TGTCTTGGA GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACC AAT CAATAATATA    180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT    240
GTTTCCCAAT CGGCTCG        257
```

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAAT CTAGCTACTC    60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC    120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAATGGG ATTCATGGGG GGCAGAGGTC    180
AAAGGTGAAG CAGAACTCAG GGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA    240
GAGTCAGAAG GGTGCTCGA G        261
```

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTAAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA	120
TAAGTAGGGA TTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT	180
TTAAAATAAA TATATTTTGG CCAAAAGAAG TGTAAGTTCA AAGAGTTAAC ATACAGATTA	240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AAACATATACA	60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAAT	120
AAATTTCTAG TGATTTATTT TGACTTTCAT GCATTTGGAT GATTTTAAAG ATTTTATATA	180
AAAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAAGAA AAAGTTGTAT AGTCTTGGGA	240
GGGGGGATTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTCTT TTTGCACACT CATCTCATTG TATGCACTCT TGGGCTGTAA CTGTCATTTC	120
TTTTCCTGTA CACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCACATTGC ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTTT AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTGTTTAA	120
TTTCTATGTA TTTGTACATT TTTTCTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCTA ACCCAACGGC AGCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTCTGT TTCTTCCCTG      60
TTGCAACAGC CCATCTTCGT GGGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCTG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCAT TACTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCCCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTG TGATTGTGG TGTGCAGTAT CCGGGAAAAG CTCGAG                                         286

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCTAGA CTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTTAAAA GCATACCACT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTGTAGTC CAAGTTCCAG      180
GTAGGCCATG AAGGTCGAG                                         199

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

```

GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG      60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCGG TTCTGTTTGA      120
TGGTGAAGAA GGGCTACCGG GATCCCCCT ACCACAACG GATGCACGCC TTTTCTGTCT      180
CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG          233

```

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```

GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA      60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTACTCTCCC AGTGACCCAT      120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCTCCTT      180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT      240
GTGTGTTTTG CATTGAGAAC TCCCCTCCG CTCGAG          276

```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA      60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC      120
AGGAATGCCT TTTAGTATAG TTATTTCAC TACTATTTTA TAGCATATTT TAATTGTATA      180
GTAAGCATTG TGTCTGTTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG      240
GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG          273

```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTAAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA      180
TTAATGACCT CTCAGTGAT GTCCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAACTGGA GGAAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAACCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTTA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTTA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTCCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTCCCTT      300
GGGACCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCAG      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTITTTTT TTTATCACA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTTACT CCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTGTG 60
 GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120
 ATTTTTTCTA CTTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180
 GATAGGATTA TTTTGCAGTT TTGAAACAAC ATACAAATTG TTATAGATTT CAGAGTAGGG 240
 CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
 ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGCTTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
 CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AATGGAGGA TGTCTGTTCC ACGCAGACCC 120
 TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180
 GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
 CTTTTTGGA GCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTATATA CATCTTATTT ATAAATCAGT 60
 GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
 ACAATGATTT CTGCTATAGA TTTTATAATG GGGATTCAGA GAAGTAGAGT TATGGTGCTG 180
 GTTCACTGCA TTGATTGGAT CAGGCGCTGG AACTCTCCC TGATAGATTT TATTCTCACC 240
 TGTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTTAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTC      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTGTCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG          172

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTTCCTTA CTAACAAAAA CCAAAAAACA AATCTGTTT      180
ATAATCACAG ATTTTGTAGC AAATTTCTTG TATCAGGAAG AAATACAAAT TTTGTCTATG      240
TTCTCAAGCA GTGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC TTCATGGCCT AAACCTAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC	60
ATTTCAAGTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA	120
CATGGCAGGT AATCCAAACC TTTTCTATT ACTGAAGATT TTCAGCTCTC TTACAGAAAT	180
ACACAGGCTA CCATTAAAT TGTAGGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA	240
AGTACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 260 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAAGGG	60
ATTGCTTTCA TCTAATCTG GCAGGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA	120
GACAAAATAT CGCCGTGTT CCTTCTGTAC TAAAGTATTG TGTTTGCTT TGGAAACACC	180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA	240
AAATTGGAGA AAGTCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 354 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC TTCATGGCCT AATTTCATCT TTTTTCCTG GTGCTGCATA AACATATATT	60
AAATGTTGTT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA	120
AGCTGCTTGA GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTTCTC	180
TCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG	240
AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTTGCCA TCTAGCATTC	300
AGTGTTGTGT CTTCTAGTG GGCATGAAGA CGGCTTTAAA ACCATCCACT CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 493 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GCTGAAAATG	CAAAACATGA	AGAAAGTGAT	TGAGGCAATT	CGAGTGGAGC	TGGTTCAGTA	60
CTGGGACCAG	TGCTTTTATA	GCCAGGAGCA	GAGACAAGCT	TTTGCCCCTT	TCTGTGCTGA	120
GGACTACACA	GAAAGTCTGC	TCCAGCTCCA	CGATGCTGAG	ATTGTGCGGT	TAAAAAACTA	180
CTATGAAGTT	CACAAGGAAC	TCTTTGAAGG	TGTCCAGAAG	TGGGAAGAAA	CCTGGAGGCT	240
TTTCTTAGAG	TTTGAGAGAA	AAGCTTCAGA	TCCAAATCGA	TTTACAAACC	GAGGAGGAAA	300
TCTTCTAAAA	GAAGAAAAAC	AACGAGCCAA	GCTCCAGAAA	ATGTTGCCCA	AGCTGGAAGA	360
AGAGTTGAAG	GCACGAATG	AATTGTGGGA	ACAGGAACAT	TCAAAGGCAT	TTATGGTGAA	420
TGGGCAGAAA	TTTCATGGAGT	ATGTGGCAGA	ACAATGGGAG	ATGCATCGAT	TGGAGAAAAG	480
GAGACTCCTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC	TTTCATGGCCT	ACACACGGCC	AAATTTGAGG	GCATTCTCAC	ATGTGTTCTT	60
CTCTCAAAAC	CACTGGGGTT	GACAGATCCA	GGAGGCTAAA	AAAAAGTGAC	CTCTATAATT	120
CTTTAAAGGT	GCTATTTTTA	GAANATTGTA	TAATTTATTC	ACAGTATATC	TAAAAAGAAA	180
TTAAGGACAA	TTAAATATATC	TTATGTGACA	GCCTTTATGT	CTAGTCACAT	TTGATGAAAT	240
AAAAAAGTTC	TGAATCTGAA	TAGAAGTTCT	ACTGTNTCAG	GATTGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GAATTCGGCC	TTTCATGGCCT	AAAAAGACAG	GAAAATAAGT	CTCTTTGTAT	CCTTATTAAT	60
CATTTGAAAT	TATGCTATAA	TATTTTAA	AACTCACCTG	TTGGTTCTG	GGTGAAGCAG	120
TTCTGAAGG	AGTGTTTGT	CAGAATATAT	TGTTAGGTGA	ATAGAGGGTT	CTGTGGCCAA	180
GTAAGTTTGG	GAAATAGTGG	GTTAGACAAA	GTTGAGTTAC	TGTTGGCCTT	TCAGACCTTT	240
GATACGCTAA	TGTGCATTTT	AAATCTCCAA	GAAGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTTGCTT ATAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCTTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGTCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGGAA ACAGATCACT GCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTTCCGC ACGCCTGCTC GGCCTGGGCG	180
CAAGCATAGT GTCGTCGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCCA AATTACTTTG TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
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```

GCCTCTCTGT TCTGGTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTATAAG 120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT 180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC 240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG 300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT 360
GTGGCACCAT AAACTTTAGC AGCTGGAAT CCTCGAG 397

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTAA TAAAGCCATA TCATACCTCT CTTTAACATT 60
GTTAAAAGGA AACTGTGTGT GTGTATTGT GTTAATGTTA ANTTCTCTC ATTTTGTGC 120
TTGGGGGGCT GTTTATTGA GGATGGTCGG GGGCGGGTG GGTGAGACCC ATCCATCCCC 180
CATGAAGAC CAGACCCATC CATCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC 240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG 300
GCCATGGATT TGCTTTGAGC AAACACCCG CAGTCAGGAC TTACTCCTGG AAAAAGGACA 360
TCTTCTCGAG 397

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA 60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG 120
ATTGAAATT TAATACAATG GCCTTTTGTA ACTATTTTCTA CTATTATAGC TCAGGTGTTT 180
GAATTCTCTC TACCCACCT ATCACCCTTA TCCCCTAACA AAGAGTCTGG CTTCATAAAT 240
ACTGTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA 300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG 340

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG 60

```

```

AGTGTCTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT 120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTATTCTA GTAAGACTGA 180
AAATTTTCAAG TGGGATTGTA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT 240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGGGAAGCATG GAGACCATT AATTATGGGG 300
GCAATGGTAG AGGGAAGAGA AACAACTGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA 360
GCCACTCGAG 370

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT 60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC 120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TCGGAGCCGG 180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC 240
CTCCAGGCA GTGCCCCCCC GACTCTCGAG 270

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA 60
GTTTACCTCA ATGAAAAGAT AATGTGGCGG TACAACCTACG ATCTGAATGG AAACCTCCAT 120
TACTGAACC CAAGTAACAG TGCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA 180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG 240
GGCACGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG 286

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTITA 60
AAAAACAGGG AACTAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC 120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG 180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA 240

```

AAGGAGCACT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	AGAAATGGTT	CTGAAAGCGA	CAGTAGAGAG	ATGCAGTTGT	60
GATGATTTC	ACAACCTGGA	TGTTTTCTTT	CTCCTCTTTG	CTTCCATTCA	TCTCTGTTGG	120
CTGCTGTGA	TGGAGTCAGA	CAGTAAACAC	GTGGCTTGGA	TAACACCCAT	CATCCTATGA	180
AGAATATAGG	GAGTACTTGT	TCTCTGTTGA	TTCAACTTTT	ATGTCTCCAG	TAACATTGCG	240
CTTATGAAGG	TACCTGTATT	TGTATGGACT	CTGAATAAAG	AAGAATTCAT	TTGTTTAGCA	300
AGTATTAGTT	CAGCAACCAC	TGAGAAACAA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATCATGTC	AAAGAGTACT	ACATACAGTT	TGGAATCTCC	60
TAAAGACCCG	GTACTIONCAG	CTCGTTTCTT	CACTCAACCT	GACAAGAATT	TCAGTAACAC	120
CAAAAATTAT	CTGCCTCCTG	AAATGAAATC	ATTTTTCAC	CCTGGAAAAC	CTAAAACAAC	180
CAATGTTCTA	GGAGCTGTTA	ACAAGCCACT	TTCATCAGCA	GGCAAGCAAT	CTCAGACCAA	240
ATCATCACGA	ATGGAACTG	TAAGCAATGC	AAGCAGCAGC	TCAATCCAA	GCTCTCCTGG	300
AAGAATAAAG	GGGAGGCTTG	ATAGTTCTGA	AATGGATCAC	AGTGAAAATG	AAGATTACAC	360
AATGTCTTCA	CCTTTGCCGG	GGAAAAAAG	TGACAAGAGA	GACGACTCTG	ATCTTGTAA	420
GTCTGAATCG	GAGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGAGGCA	GGTCTAGAAT	60
TCCAAATGTA	AAATTACTA	AGGCTTTTCA	TGTGGAAGTA	GAATGCATAT	ATCTTTCTTG	120
ATATAACAAA	TGAATTTGGT	TGTAGCTAAC	GTGTTGTACT	AGTAAAGGTC	CACCTGCTAA	180
ACTTTTCTT	TTTTGTTGAG	GTATAGACAG	TAGAGTGATA	CCGATACATG	AGGAAAATGA	240
GAACTGGAAT	GCAGGCCAAA	AGCTGGTCCT	TTCCAGATGA	ATGTAACCAA	GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACACCTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAACT TCTCTCCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGTACCGCT TTACCCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCGGAA TGAAGCTTAC ACCAACCAACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTCATCA AGAGGAGTCG CGGCGGCAAG TACCCAATAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAAGTGG GGTCAAAGAA TTACGGAAAA TGTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACCTCT TCTTGACCTT TGTAAGGAA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGGTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACGCG      360
CTAAGAAATT AAAAGACAGA ACAAAGTGT GGATCATGTC CCTCGAG          407

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACCTGCATC TCAAAACAAT      60
ACATTTCTCT GGTGAAGTT TTAGTGAAAA TCGATTTATT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTC      180
CCCATGTTTC CTTCCACCCC CAAATTCTTA CCCCATTTCA GGCAGAGCTG AGCAAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGGG GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAT GTCAAAGGTA TTGGCCCGAG TCGAG          395

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTC ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTCAT GTGTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                                                                   268

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTG TG TCACTTCCA      120
CTACATACCT TACGATCTCT TTTGCTTTGC TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCG CAATTTTGCA CTACTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAG GACCTCGAG                                                                                   260

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

```
GAATTCGGCC TTCATGGCCT AACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT    60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA    120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTTC CCAATTTTAC TTCTCGTCCC    180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC    240
AGACCCAGTC ACCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```
GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG    60
TCCTTGGGAA TGAAACGTAA CAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTTC    120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT    180
TATAAATAAA TGTCATTGT AGGAAATTGG AAAAATAAAT GAAAAAGAAA AACTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```
GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTCTTCTGT TCTCTACTCT TGAAATGCTA    60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA    120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTCCCAC    180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT    240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA
```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 656 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC AAAGAGGCCT AGTTATAATG ATGGAAGAAG TGGAAAACT TTGTGATCGG      60
CTTGAAGCTGG CAAGCTTACA GTGCTTGAAT GAAACACTCA CATCATGCAC AAAAGAATAG      120
GAAAGGCTGC TTTGGAAAAA CAGATAGAAG AAATAAATGA GCAATCAGA AAAGAGAAAG      180
AGGAAGCTGA GGCTCGTATG CGACAAGCAT CTAAGAACAC AGAGAAATCA ACTGGTGGAG      240
GTGGAATGG AAGTAAAAAT TGGTCAGAAG ATGATCTACA ATTACTAATT AAAGCTGTGA      300
ATCTGTTCCC TGCTGGAACA AATTCAAGAT GGAAGTTAT TGCTAATTAC ATGAACATAC      360
ATTCTTCCTC TGGAGTCAA AAGACTGCCA AAGATGTTNT TGGCAAAGCA AAGAGTCTCC      420
AAAAACTTGA CCCTCATCAA ANAGATGACA TAAATATAAA GGCATTTGAT AAGTTCAANA      480
AAGAACATGG AGTGGTACCT CAAGCAGACA ACGCAACGCC TTCAGAACGA TTTGAAGGTC      540
CATATACAGA CTTACCCCT TGGACAACAG AAGAACAGAA GCTTTTGAA CAAGNTTTGA      600
AAACATACCC AGTAAATACA CCTGAAAGNT GGGAAANAT AGCAGAAAGT CTCGAG      656

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTCGGCC AAAGAGGCCT AGAGACAAAT AGGTGATACT GAATTTTATA CTGTTTCTA      60
CTTTTCCATT AAAACATTGG CACCTCAATG ATAAAGAAAT TTAAGGTATA AAATTAATAG      120
TAAAAATTAA TTTAGCTTC ATTTCGTATT TCGAANCAAT CTANACTGTT GTGATGAGTG      180
TATGTCTGAA CCTGTAATTC TTAANAANCT TCTTAATCTT CTAGAAGAAA AATCTCCGAA      240
GAGCTCTCTC TAGAAGTCCA AAATGGCTAG CCATTATGCT TCTTTGAAAG GACATGATAA      300
TGGGACCAGG ATGGTTTTTT GGAGTACCAA GCAAGGGGAA TGGAGCACTT TAAGGCGGCC      360
TGTTAGTAAC ATGAATTGGA AATCTGTGTC GAGTACCTCT GATCTAAACG GTAAACACAG      420
CTGCCTGGAG AGCAGCTGTA CCTAACAATA CTGTAATGTA CATTAAACATT ACAGCCTCTC      480
AATTCAGGC AGGTGTAACA GTTCCTTTC ACCAGATCTC GAG      523

```

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

```

GAATTCGGCC AAAGAGGCCT AATTTCTTCC TGTGATATGA GAATTTCTTT TCTTTCAGCA      60
GCTTTACCTG CATTTGGCTT TGGCTTTTGC AATCGGCCCC TCATTCTCGA G      111

```

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG      60
TGAAAGAAAA NATCACAATA CAGGGAAAAG TGAGCTAAAA ATCCCAGCAT TAAAAAGCCC      120
TTGATGTGGT CCTGAATCGG CTATTTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC      180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATAC ACATTCTCTG      240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC      300
TCTCTTTTGG ATTTTATCC TATAGTGGTA TCTATCTAGA GGCTGGTGAA GACAGTGTGG      360
TGAAGGAAA GTGGGAAGGA TACACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG      420
TCATCTGGCT TGATAGGGAA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG      480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTTGTTTAC CATATTTCTT CTTCTGCTGG      540
GGCTCTGGCA CCTTAATTGG TCAAAAGGCA GCACTCGAG      579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTGG      60
AAACCAAAAA TGCTTTGAAC ATAGTGAAGA ATGATTGAT AGCAAAAGTG GATGAAGTGA      120
CCTGTGAGAA AGATGTGCTG CAAGGGGAAT TGGAGGCTGT GAAGCAAGCC AAAGTGAAG      180
TAGAGGAAAA GAACAGAGAA TTGGAGGAAG AGCTTAGGAA AGCTCGGGCA GAAGCTGAAG      240
ATGCAAGGCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTG TGGCATCAGA GAGAAAGATG      60
AGAGCTCACC AGGTGCTCAC CTTCTCCTG CTCTTTCGTG ATCACCTCGG TGGCCTCTGA      120
AAACGCCAGC ACATCCCGAG GCTGTGGGCT GGACCTCCTC CCTCAGTACG TGTCCCTGTG      180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT      240
CACACTGCTC CTGATGCTCA TCCTCCTGGT GCGGCTGCCC TTCATCAAGG AGAAGGAGAA      300
GAAGAGCCCT GTGGGCCTCC ACTTTCTGTT CCTCCTGGGG ACCCTGGGCC TCTTTGGGCT      360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACTCGA      420
G      421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAATGAAA GTCTTTTCTC AAAAACTTC TTCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CTTCTGGCT CTCACCTGT ACCTCGTCCT TGTTGCCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCATAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT	180
GTAACCTCTC TGCAAATAAT ATTCCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAT	240
AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAAC AACTTAAATT CAGAACAACT CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAAATTT	180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTACTCAACT	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTGCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	TTCATGGCCT	AGCGGCAGTC	CAGATCACGG	TTACTGTGAC	CTGACTGGAG	60
AAAAATTATG	TGCTGCAAT	GATAGTTGGC	AAGGTCCTGA	TTGTTCTTTG	AATGTTCCCT	120
CTACTGAGTC	TTACTGGATT	CTGCCAAACG	TTAAACCCTT	CAGTCCTTCT	GTAGGTCGGG	180
CTTCACATAA	AGCAGTTTTA	CACGGGAAAT	TTATGTGGGT	GATTGGTGGA	TATACTTTTA	240
ACTACAGTTC	TTTTCAAATG	GTCCTAAATT	ACAATTTAGA	AAGCAGTATA	TGGAATGTAG	300
GAACTCCATC	AAGGGGACCT	CTCCAGAGAT	ATGGACACTC	TCTTGCTTTA	TATCAGGAAA	360
ACATCTTTAT	GTATGGAGGC	GCCCCAAGGC	CCGACCCCTC	CCCCAAAGGG	GCAGTCCCTT	420
TCTTGCAAGT	CTCAGCTTGC	GGGGTGGGGG	GAGTCATGCC	CAGGGGAGGA	GACTTTTTAT	480
CTGGAGGGGA	GAGAAGGATT	CTAGGGGTGT	GGAGTTGGAG	AAAGAGGCTT	CCTTGAGCCA	540
CCCTTCCAC	CCCAGCCCTT	GNTGGTCCCT	AGGCCAAGCC	ACCAAGTGAA	ACCTTCCAGG	600
ATACTAGCCC	GCCAGCTGTG	GGCCCCAGAA	AGCCAGCCTG	CCTTTTAGCA	CTTGATACA	660
CACAGACCCA	CGGAGCTCTC	TGTGTTGGC	CTCTCACACA	CACACAATC	GAG	713

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC	AAAGAGGCCT	AAGAGATTCA	GGACCTGCAG	AGTCGCCAGA	AGCATGAAAT	60
TGAATCTTTG	TATACTAAAC	TGGGCAAGGT	TCCCCCTGCT	GTCATTATTC	CCCCAGCTGC	120
TCCTCTGTCG	GGGAGAAGAA	GGAGACCCAC	TAAAAGCAAA	GGCAGCAAGT	CTAGTCGCAG	180
CAGCTCATTG	GGCAATAAAA	GCCCCAGCT	TTCAGGCAAC	CTGTCTGGTC	AGAGTGGAAC	240
TTCAGTCTTA	CACCCCCAAC	AGACCTCCAC	AGTCGAG			277

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC	TTCATGGCCT	AAGGCTACCG	ATATTGGAGA	AGCTAACTAT	GGGTTTTACC	60
ACACGTAACA	GCTTTTGGT	GAAATCAGTT	GTTATACTAA	TAAGCTTTCC	TCTAATTGAT	120
TTGAGTTTGT	GTTTTTGTGT	TTGTATTGTC	GGGTTTGTG	TCTTTTGTG	TCTTGTTTT	180
AGTAAATTGG	TTTTTCTTCA	ATGTATTTTC	TTAAAGTAGT	CTAGCTTTAC	CCAGTTTCCT	240
TGGCAAAATTG	AAATTTAGGC	CATGAAGGCC	GAATTCGGCC	TTCATGGCCT	ACTCAGCCTC	300
CCCCAAGTAGC	TGGGACTACA	GGCGTGTGCC	ACTATTCTCA	GCTGATTTTT	GTATTTTITAG	360
TGGAGACGGG	TTTTTGCCAT	GTTAGTTGGC	CAGGATGGTC	TCTCTCTCGA	CGTCGTGATC	420
CGCCCGCCTC	GGCCTCCCAA	ATTGCTGTGA	TGACAGGCGT	GAGCCACCCC	GCNTGGCNTG	480
TCCTACCTCT	TTTTTAAGAC	CTCTTCTGT	AAGCACTGGA	TAATCTACTT	CTAGTAATGT	540
GAAACTGACT	ATATNTTGAA	TTCATATGTT	TTCAATCAAC	CTGTTGCAGT	TTATATTTCA	600
CACCTGCTC	CCTTTTGACA	GTTAAGTAC	AGATAGTCTC	AGCAGTCTG	GAGACCATGT	660
AAAGCTCGAG						670

(2) INFORMATION FOR SEQ ID NO:130:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAACATAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCCAACCC ACTTTACTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:131:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 535 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCAAT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGTCTA      300
TCACCTTTAG TATATTAATC TTTGGCACAG GTTGCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

```

(2) INFORMATION FOR SEQ ID NO:132:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 401 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTCAG GTGCGGCCTG TGCAGATCGG CTTTTTGGTT TGGTTGCTCT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTTCTTT      180
TTGGACTTTT CTTTTGGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTCT GAGAGGGTTT AATTGCTTCC 300
GTAGCAAATA TATCATCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA 360
CTGGATTTTG TCTCATCTT CTTGACTTTC TGATCCTCGA G 401

```

(2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

```

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA 60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG 120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT 180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAACTG 240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT 300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA 360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTCA 420
AGTTCGTAAG CATTTTTGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA 480
GTGATGCATG GCTCGAG 497

```

(2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 362 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

```

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGAGTC AAAGTGAAC 60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT 120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG 180
GCAGCCAATT GTTCTGGGG ATATATTCT AATGAAGTGC TAGACTATCC AATTACTTAA 240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT 300
CTTAATAAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG 360
AG 362

```

(2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

```

GAATTCGGCC TTCATGGCCT ACCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG 60

```

```

CATCTTCTGT CACTGCTGGA GTTGCCAGTT CACTCTCAGA AAAAATAGCC GACAGCATTG      120
GAAATAACCG GCAAAATGCA CCATTGACTT CCATTCAAAT TCGTTTTATT CAGAACATGA      180
TACAGGAAAC GTTGGATGAC TTTAGAGAAG CATGCCATAG GGACATTGTG AATTGCAAG      240
TGGAGATGAT TAAACAGTTT CATATGCAAC TGAATGAAAT GCATTCTTTG CTGGAAAGAT      300
ACTCAGTGAA TGAAGGTTTA GTGGCTGAAA TTGAAAGACT ACGAGAAGAA AACAAAAGAT      360
TATGGGCCCC CCTCGAG      377

```

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCTT CATGCAGCTG GTGGAAC TAG ATGTGTCTCG      60
AAATGAGATT CCTGAAATTC CAGAAAGCAT TTCATTCTGT AAAGCACTGC AGGTAGCTGA      120
CTTCAGCGGA AACCCACTGA CTAGGTGGCC AGAAAGCTTT CCTGAATTAC AGAATTTAAC      180
ATGTCTTTCT GTAATGACA TCTCACTACA GTCTCTACCT GAAAATATTG GCAATCTTTA      240
TAACCTGGCT TCACTGGAAC TGAGAGAGAA TCTTCTTACA TATCTTCCTG ACTCTCTTAC      300
CCAGCTGCGA AGACTAGAAG AACTTGACTC GAG      333

```

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

```

GAATTCGGCC AATGAAGCCT ACTTTAGTAT TTTGGCACTT CCTAATTGAC ACCTTGGGAG      60
ACTGCAGGAA GGGAAACGAGA ATCATTNNNTA GGNTATTGTG GTGTGTGTGT GGTTTTTTTT      120
TTTTTTTGGG AGACAGAGTC TCACACTTTT GCCCAGGCTG GAGTGCAGTG GCGTGATCTC      180
GGCTCACTGC AACCTCTGCC TCCAGGGTTC AAGCGATTCT CTTGCCTCAG CTTCCCGAGT      240
AGCTGGGATT ACAGGCACAC GCCACAACGC CTGGCTAATT TTTATATTTT TAGTAGAGAC      300
AGTCTCGAG      309

```

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

```

GAATTCGGCC AAAGAGGCCT AAAGTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTG AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTTCTCA      120

```

```

GTGCCTGTTT TGTCAACAGT TCTCTTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG 180
GTGAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT 240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA 300
CTGCTATCAA AGCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG 360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAACAT GATGGATGGG 420
GAAAGCATT TGTCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC 480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTG 540
AGAGACTGTT AGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG 599

```

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTCGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTCTCTG CAAGAAATAA 60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCATTCTT GAAGGAAATT ATTAGCTCTG 120
CATCAGTGGT GGGCCTTAAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAAGCACT 180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC 240
TAATTGATCC AGAACTCTC CTCCACGGC TTAAGGGGTA CTGATATCA GGCTCATCAT 300
ATGCCCCAAG CTCAGTGGTT ACGGCTGTGA AATTTACAAT TTCTGACCAT CCACAACCTA 360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTTCCTAAA AACTTTGGAA GACCCAGATT 420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT 480
TAATAAGGGA TCTATTGGAT ACTGTTCTTC CACATCTTTA CAATGAAACA AAAGTCTCGA 540
G 541

```

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTTT GGTAGTACCA 60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG 120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTAGA ATAGACCACT 180
TAACACCATA TGAAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC 240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC 300
ACCCTAATGT CTGTTGGCTG GAAGGTCAGA GCAGTTCACC AGTGAAATG GGTACGCCAT 360
GAAGGCCGGC CTTCATGGCC TATAGGCCAT GAAGCCGAA TTC 403

```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```

GAATTCGGCC TTCATGGCCT AGTCCTCATC TGCTGGCATT TTGTGGGGTG TTAGTGCCAA      60
ACTTGAATAG GGGCTGGGGT GCTGTCTTCC ACTGACACCC AAATCCAGAA TCCCTGGTCT      120
TGAGTCCCCA GAACTTTGCC TCTTGACTGT CCCTTCTCTT CCTACCTCCA TCCATGGAAA      180
ATTAGTTATT TTCTGATCCT TTCCCCTGCC TGGTCTAGCT CCTCTCCAAA CAGCCATGCC      240
CTCCAAATGC TAGAGACCTG GGCCCTGAAC CCTGTAGACA GATGCCCTCA GAATTGGGGC      300
ATGGGAGGGG GGCTGGGGGA CCCCATGATT CAGCCACGGA CTCCAATGCC CAGCTCCTCT      360
CCCCAAAACA ATCCCAGCAA TCCCTTATCC CTACCCCAAC CCTTTGCGGC TCTGTACACA      420
TTTTTAAACC TGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```

GCGATTGAAT TCTAGACCTG TGTGTCTAGC TGTGATGGAA TCTGAAATGA AGTTTGACAA      60
GGACCATGAT GGAATCATTG AAAATGGAGG CTATGCAGAC CAGACCTATG ATGGATGGGT      120
GACCAAGGC CCCAGTGCTT ACTGTGGAGG GCTGTGGCTG GCAGCTGTGG CTGTGATGGT      180
CCAGATGGCT GCTCTGTGTG GGGCACAGGA CATCCAGGAT AAGTTTCTT CTATCCTCAG      240
CCGGGGCCAA GAAGCCTATG AGAGACTGCT GTGGAATGGC CGCTTACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

```

GAATTCGGCC TTCATGGCCT AGGGAGGCTG AGGTGGGAGG CTCACTGGAG GCCAGGAGTT      60
CGGAACCAGC CTGAGCAACA TAGGGAGACC TCAGCTCTAC AACTGAAAAA AAGATAGCCA      120
GGTGTGTTCA TGGTGGCACC TGTCTGTATT CCAGCCGCTT GGGAGGCTGA GGCAGGAGGT      180
TTGCTTGAGT CCAGGAGTTT GAGGTGCGG TGAGCTACAC AATGAGCTAT GGTGGCACTA      240
CTAACTCCA GCCTGGGCCA TAGAGTAAGG CCCTGTCTCT AACTGGAAGT CCAAAGAGGG      300
ATCTACTTCC TAGACTATTA ATTTAATAGA TCAATAAAT AATCAAGAAT ATGATTTTTT      360
TCTCATCTT CTCTGTAGTC ATATTTTATA CAGACTTTTT GTTTAAGTAA TCTCTCTTTA      420
TGGGCAGACA ATGATTTCAG AACACCCTG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

```

GAATTCGGCC TTCATGGCCT AGTCAGCCGT GACTGCACCA CCATACTCCA GCCTGGGTGA      60
CAGAGCGAGA TCTTGTCTTA AAACAAAACA AAACAAAACC CAGACTTCCT ATAATTCCTA      120
AAAATAAATG TGGGTTTGAG AGGCCTACCT TGAAATGTAC AAGATCCTGG CCAGACTTCA      180
CCTATCTAAC AATATGCTAG TAACTATTG TTAGCATGTC TTAAAGAAAT GTTCATCAGG      240
GCCTCAGAAA GCAAGGCAGA GAACAGGTCC CTGAAATTTA CTAGCTTGCA CCAAACCATC      300
AGATAAAGAT AGGTTAATAT TTGACAGAAA AAACCTCTCA AAAAGAGACA GTGAAATACT      360
CTTGAGATGA ATCCAGGCGG CTCTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

```

GAATTCGGCC TTCATGGCCT AGGCAGTGGA GGCCTCTGTA ATTCTAGCAT ACAGGTGGCA      60
AGTTATTACA TTATTTCTTT CCTCCTGTCT ACCTGCAGTT GGTTTATGT GGGGCGTTAG      120
TACACTTCCC AAAGGGCTTG CCCGCAGGTG AGAGGTGCAC ATTGAAGTCC CTCACCGAGC      180
AGATGGGAAG TGTGGCCATG AGAGAGAGCT TCAGGGGCCC TGGGTTTATG ACATCGCTGG      240
GCCAGGAATG AGGTTAATAT TTTTAATGGC GAAGGGTGAG CCCCCTTATT ACCCGAGCTC      300
GAG                                     303

```

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```

GAATTCGGCC TTCATGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GATCATCGTG ATTCTGGGGG TGCCCTTGAT TATCTTCACC ATCAAGGCCA ACAGCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CAGTGATGGA GTGTCGCAAT GTCACCCATC TCCTGCAACA      240
AGAGCTGACC GAGGCCAGA AGGGCTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCTAA TGGCTTCCCT GGATGCAGAG AAGGCCCAAG GACAAAAGAA      360
AGTGAACAA CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT    60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCCT TGTCCATGCT    120
CACAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCC    180
AGATCCTGTA TATCCGCAGC ATCTCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA    240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA    300
CGCCCGACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG    360
GCAGCATGAA GCAGGCCCTG GGTGAAGTGC AGGCACAGCA GCCCCCTCG AG            412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GCGGCTGCT GTACGTNTCA TGCAACCCCC    60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA    120
TTCCCTTCCG GCCGGTCAAG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTT    180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA    240
TCATAAGATT GTGGTCTTGC TTTTACTTAA TTTTGTATC TTAGCGATGT CTAGAGTTAA    300
TAAGTGTGTC TTTTCTAATC ACAGCAAATC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTGGGTGA GAGCCCTCGG    60
CAATGGTGGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGTCCGG AATTGTGTTG    120
TCCTACGCAG CTTGGTATTG TCCGTCTTGA GCAGGTAGAG CTCTTGGA AAGAACCAGG    180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CAGGCCACG CACATCACCT    240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTGTG CCAGATGTAG TCCTGCGTGT    300
TGCACCTGCA GAAGGCCCTT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT    360
AACTTGGGAA GAGGTCGCAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC    420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA    480
AG                                482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

G TTCCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CAT TGGTGGT      60
T TGGCATTCG CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTCCCATTT TTAAGAGAAT      120
A TGGAACAT  TTCATATGAT CTCCATCACG AAGATAGTGA AGATGCTGAA GAAACATCAG      180
T TCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAGAA  GGCCAGAGTA GTTATAACCC      240
A GAGCCCTGG GAAATACGTT CCCCCCTCT  CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

G CTCGCCCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTGAA TTTGGATTG      60
T GTTCAGCAC  TTTAAAAGGT TCAACTTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
T TCTCAGAT  GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTGCTGCTG CCCCTGGCCT      180
A TGGCTTCCA -GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
C CCACGCTGC ACTCTGGCT  ACAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

G AATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
C GAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
A CGGCCGCCG TTCGGGACGG CCTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
C AACTGGGGC TTCTCGACGT CCACCTTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGGCC      240
G CCCAGGTAC AGGAGGTGCT TCCCGGGACC CCCGAGTAC CTGGAGGGAC CTCCCAGGG      300
G ACTCGAG                                308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCGGCC	TTCATGGCCT	ACAATCCCAA	ATGTAGGATC	ATGCCCATTG	CCCTAAGCCC	60
AGGCATGAGA	GTCGACATCT	CTCCTCTTAT	ATACAGATCC	AGTCCACAGG	TGAAGTGGGA	120
ACTCTCCAAC	CAGGATTCAG	CACACCATTG	ATGTTGCGAC	TCCTCTACTG	GAACACAGCT	180
TGGAGAAGGG	ATTGGGGCTC	TCATGGCAGG	ATGCAATCCA	CTGTTGAGAT	TGTGACTCAT	240
GCACTTGAAC	CTAAGTCTCA	GGAGTTGTTG	ACTCTTACAC	CCAGCACCCA	GGTGATAGGA	300
CTCTCATGTC	TGGTTCCTGC	CCACAGGTGA	AATTGTGACA	TATACATGGT	CACAGCTCAC	360
AGGTGAGGTG	ATAACTCACA	TACCTGGATC	CAGCTAAGAG	AACAGATTTT	GACTCTGATA	420
TCTTAGGCCA	TGAAGGCC					438

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCT	TCATGGCCTA	CAAGATGACT	AAAGTCTTCA	CTCACCAAGG	AAAAGTGGCT	60
CTGTATGGCA	AGCTGGTGCA	GTCAGCTCAG	AATGAGAGGG	AGAAACTTCA	AATAAAGATA	120
GATGAGATGG	ATAAAATACT	TAAGAAGATC	GATAACTGCC	TCACTGAGAT	GGAAACAGAA	180
ACTAAGAATT	TGGAGGATGA	AGAGAAAAAC	AATCCTGTGG	AAGAATGGGA	TTCTGAAATG	240
AGAGCTGCAG	AAAAAGAATT	GGAACAGCTG	AAAAGTGAAG	AGGAGGATGC	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	TTCATGGCCT	AAATTTAGGA	AGGTCAAACG	TGAATCTCCA	TTTGACAAAC	60
GTCCAAGTGC	AGCAGAGATT	AAAGTGGAAAC	CCACCACTGA	GTCATTGGAC	AAAGAGGGCA	120
AAGGTGAAAT	TAGAAGCCTA	GTGGAGCCAC	TCAGTATGAT	CCAATTTGAT	GATACTGCTG	180
AGCCACAGAA	AGGAAAAATA	AAAGGAAAGA	AACACCATAT	CTCTTCAGGA	ACTATCACAA	240
GCAAAGAAGA	AAAAACTGAA	GAGAAGGAAG	AGTTGACCAN	ACAAGTCAAG	TCTCATCAAC	300
TTGTTAAATC	ACTCTCAAGA	GTGGCTAAAG	AGACTTCAGA	ATCTACCAGA	GTTCTAGAAA	360
GTCCAGATGG	CAAAGTGAA	CAGCGTAACC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGGACA	TACGATGATA	GATTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATTT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTTGTA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAC	AAAAATGTTT	TCAGACATTG	CCAAATGTCC	CCCCAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCTCC	AAATTGCTT	AGGGTTGTTA	TCCTGGAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AACAATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGTCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTCA	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCTCCCCA	GGCAGGTGCT	GCCCCAGGAG	GA CTGTCTCT	GGGAATGAAC	CTCCC GCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCGGGCCCTG	GCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTC	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTCACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTTTCATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA      60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACCTCT TTGATCTTCT GTGATAGCGA      120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC      180
TTTCTTATCC TGCCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT      240
TTTCAGAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA      60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG                                     108
```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC      60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG      120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTATTATG AATGCTGATA CTGCTCCAAC      180
ATCTCCTTGT CCTTCCATAT CTTCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA      240
GAAGATCGCC AGCATGTTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG                                     292
```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC AAAGAGGCCT AGCAAAAAGT GTTCAAAAGA GTTGTGATT ACTTTCATT 60
CCACTTTCTC ACCCCCATTC TCCCTCAAT TAACTCTCCT TCATCCCATC GATGCCATTA 120
TGTGGATTCC TCGAG 135

```

(2) INFORMATION FOR SEQ ID NO:166:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 449 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGA GTCTGAAATA GCAAGCGAAG 60
AGAAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC 120
CTACAGATGA ACTGAAAGAC TTTAACATTA TTAAAGTTAC TGATAAGAC TGTAAATGAAT 180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG 240
AAGAAGATGT CAGCATAAAA AAAAGTGTA GGAAAACTCT AAAACCTCGA ATGTCAGTAA 300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCC TAACAACAGC AGTCCAGTAC 360
AAGAGGATGC TGAATATGCA TCTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC 420
TGTCATCTCA TTAAGTAGCC AAAGTCGAG 449

```

(2) INFORMATION FOR SEQ ID NO:167:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC 60
TCCGTTACAT ATACTTGGAT TCCAGCTGGG ACCTAGATT GCTGAGGACG GAAGCCAAGG 120
AGACAGGAAC ATGTGGCTGC TCCAGCTCT ACTCCTTCTC TGCTCTCAG GCTGTTTGTG 180
TCTGAACGGC CCCGGCTCTG TGAAGTGCAC TCGGGGGGAC TCTCTGACAG TGTGGTGTCA 240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC 300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTG 360
CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA 420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCAGG 480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCCAGCA ATTACAACCC CAAGGAGGAC 540
CACACATCCA GCCACCCCGC TCGAG 565

```

(2) INFORMATION FOR SEQ ID NO:168:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:


```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT      60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTTTC      120
AGTTCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG                                158

```

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA      60
TTCCCTCTCA CCAAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT      120
CTAGTTTCCC CACTGCAACT CTTCCCTTAA TATATGTACC TGCTCTGTA TCCCTCTCCA      180
GCTACTTCCC TATTTTCTGT TCCCTTTTAC AGGAAACTT TTCTCCAGCA TTTCCAATG      240
CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTCTCAAAC CATTTTTATT AGGCTTCTTT      300
CCCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC      360
TTCTTTCTTC CCAGTCTCTC GAG                                              383

```

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG      60
TCTCTCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTTCTC AACCTTTGCC      120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC      180
ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACCACCA TTTCACACC AGCATATCCA      240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC      60
TGTTCTTATT CCACTGGTTT CTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA      120
CTTCCACAG GGCTGCACTA GCACAGCCAG CCTTGCTTT TACAGCCTGC TCTTGCTTAT      180
TACCATACCA GTGTATGTAT TCTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG      240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCAG 60
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTC 120
GGTTAGGTGC AACGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCTGCC ACTCCCCTCT TCTTTT TTTT CCAACATGGC CTGCTCCGC 60
GTACATCGCC ACCCAGGGAC CGCTGCCCGC CACCGTGGCT GACTTTTGGC AGATGGTGTG 120
GGAGAGCGGC TCGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180
GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60
AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC 120
CCCTTCTTCA TCTTTTCCTC AACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180
CACTCGAG 188

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTTCGGC	CTCTGCCTCC	TCCTGCTGCT	120
GCTGTCCCA	CCGCCACTGC	CCTTGACAGG	GGCCCATCGC	TTCTCCGCAC	CTAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCACACTC	TATGTGGCGC	CAGTGAACCG	240
CCTCTTCCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 327 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCATGATAGG	AGACATCATC	AACCTCGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCG	TCAACGTGGA	GATCGTGGAG	GAGCCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGAGGTGC	AAGATGTGTC	GCCAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAGGTTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGGAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCC	CTGCTGAATG	TGGAGCCTGC	TGGGGCCACA	CTGATCCGGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCTGAA	CTACTGAGGG	GATGGGGAAA	ACCAGCAGAG	180
CTCCCCAAGT	TGGGGGCCCC	ATCCCCTGGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCTTGATG	CCCAGTATTT	TGGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AAACTTCACT	300
GTGTCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCCT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG      60
TGCTCGGTGG TGTACCCCCC GCCGAGCTGC CAGTGCAGAA GGCCACTATT GAACTCCTGC      120
ACACGCCCCA ACTTGTGAGA TCGGTCAACA ACAAACAGGT TGTTCTTTT GACTATCTTT      180
ATTGGCAGCT TGTGAACTT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG      240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTTT TCATCGCTTT CTGTCTTCTC GCTGTCTACC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC      60
TGGCAGCTGC AGCTATGTTA GTGCTTCTTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA      120
TCTCAGGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCAGT CTCCCAGGTT      180
TGTGTTCAAG GTCTTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTC      240
AATCGAG                                     247

```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCAGAG GTCTTAAGAC TAAGTTCTGC      60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACCTC      120
ACTACCTTTG GCGGTAGAAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA      180
TTCGAGACAA TTATTTTCTT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC      240
CTGGTGTTTT TGGGTTCTTT AATGCTTCTT TTAGAGCCAC ATTTTCTTTT TCAAACCGAG      300
TTCCCATCGC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTT ATCACCACCA TGGTTATGTT      60
GGCTGCCCTG GCTCACCATT TGTTTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT      120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT      180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGACTGGGTG ATAAATGAGC TGCCTACCA      240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CTTTGTCTA GAGGAGAGGG ATTGGGACCC      300
GGGATTGGCC ATCATCGACA ACCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC      60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC      120
GAG                                     123

```

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```

GAATTCGGCC AAAGAGGCCT ACTTGGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC      60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA      120
ACATGTGGCT GCTCCAGCT CTA CTCTCTC TCTGCTCTC AGGCTGTTT TCTCTGAAGG      180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA      240
GCATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA      300
GCTCACTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC      60
ATACCCTGCA TAGACTTTAA GATTCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT      120

```

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC	AAAGAGGCCT	AGGAGGGGGA	AGAGAGTCCG	TTTGCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCCTCGGAG	GACGGTGACA	TAACGGATAA	GAGTCTTTGT	GGAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGCAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAACTAGA	AAGCTTGAAG	AAACATGTAA	AAGGTCTACT	TAACAGGTTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTCC	GCTCTCATGG	GTGCCTGCGT	CACTGCCTCG	GCCATGCCCA	360
GCAGACTGAT	GATGGAGCAT	GTTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC	AAAGAGGCCT	ACTACATTTT	TACCTAAATT	TATAGAAAAT	CAATTCGGAT	60
TGACATCCAG	CTTCGCAGCT	ACTCTGGAG	GGGCTGTTTT	AATTCCTGGA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTTCAA	AATTCAGAAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTCACATCT	GGAGTTGCAC	TTACGCTGAG	TTTTGTATTT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATTT	GCTGGTGAT	CTGAATCATA	TAATGGGACT	GGAGAATTGG	300
GAAACTTGAT	AGCCCTTGT	AATGCCAATT	GTAACGTACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA	AGAGCCTAAA	ATCTACAAGC	ACCAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAAACAGGGG	GTCTCAGCCA	AGAATCAAGG	TGCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAGT	CCCAGCCCAG	TGCAGGCCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

```

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG      420
GCTGGGATTC CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC      480
GACTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

```

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT      60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG      120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG                          163

```

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

```

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC      60
TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTT TATCAGGTCT CTGCCCTCCT      120
GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC      180
TGTGCTCAGC TTTCACCTTG AGTGTCTTATC CAAGAAGTTG GATAACCCCTC TCAAGTTATG      240
GCCTCCATTC CAGTGCGCCT CAGTCTATGG GGATGCATTG CACTCACCTT TGGGCCTAGG      300
GCAGGTCGAG                                         310

```

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

```

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTACT TTTGCGGCTG TGTCTCTCTG      60
AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC      120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTCCAAAAAT      180
AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCACCTGACC      240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG      300
GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA      360
TGTTCTTGGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT      420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGAAG AGTCCTGCAA      480

```

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT	60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT	120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGTCTA TATTCAAGAG	180
CTCACCCTG ATGGGCTGCT TTCTCTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG	240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTCTC	300
TAAAAGTGAA AATCTCGAG	319

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT	60
GGTAAAAGAT GACAGTGAAT TGTATGGCG ATGGATTAGC CGTGGAGGT GTTGAGTATA	120
AGTGGTCTCC AGCCAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGCT	180
TTATCTTTAT CTATCTTGT CAACAGTATG TACATGTGTC CCCAGCCCC AAATAACTGT	240
ACAGTTTAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAAT GCTGTAACAG	300
CATATCCTCA ATGCCCATCA ATTCTCCACG TCCAATTCT CCATGGCCTC CTCTGCCTCT	360
GCTGATCTGT GAACTTCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT	60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA	120
GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAA AAAAACCTCC TACAATAAAA	180
CTGAAAAATT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTCGTTTAC ACAAATGAAG	240
AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA	300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC	360

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAAGC AAGGATACTA AGAAAATAGA 300
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480
 AAGTAAGCAA ATGCTCGAG 499

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60
 CATTTCAATA ATATTTTAGT AGGTGTTCAA TTTCAATGGA TATTCTTTT TTTTAATTGT 120
 CTTTGTACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG 180
 AAGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60
 ATCCTCACTG GACGGCTTCC TGTTCCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TCGGTTTCA GCCGGTTACG 180

```

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT      240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACCTGGGC CTGGGTTGCC      300
CCCCAAACCA TGTTCAAGCA CACGCCTACC AGTTCACCTA CCGTGTACT GAATGTGGCA      360
TCAGGGCCAA AGCTGTCATC CTCGAG                                           386

```

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

```

GAATTCGGCC TTCATGGCCT AGTTTTGTG TTTTTTCTT TTTTGGTATT ATTTTGTGTTG      60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTTCCAT GTTCTTATAA      120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA      180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCTT GAAGCATGTG TGTACATACA      240
TACATATGTG AGGGGTTTGA TGAAGTTTGT ACCAAATTGT GTTCTTAATA TATACAATGT      300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA      360
CTGAAAACAG GTAAGTTTCT TTCTTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA      420
GAGCTCGAG                                           429

```

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

```

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT      60
GACACAGAAA CTCCAGGTAG CTTCTGAGAG TGAGGAAGAG GAGGGAGGCA CACAAGATGT      120
GGAAGAATC CTGTGCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA      180
TCCCTGGATG CTCAGGAGCT GCACCAAGTA CACCAAAAGAG GCTGCAACCC AGGAGGACCC      240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC      300
AGTGGCAGAA GAAGAAATTT TGTTGAGAGA ATTTGAAGAA AGGCTCGAG                                           349

```

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

```

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTCT AAGATATCCC      60
ATTTTCTCTA TACCATTGTT TGAATAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC      120

```

```

TTAATTAGTT TTTGTGTTTG AAGTCCAGA ATCTCTTCCT GGCCTATGTA TTGTGTTCCG      180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTAATTATTAT TGTCTTCATT TTTATTACTA      240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAACCTAA AAACACACCG      300
CCAACGCTCG AG                                          312

```

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT      60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAG      120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTGG TATGGAGAAA ACCTGGAGAA      180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGGCG      240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTTAAATACA      300
GGAGTGATAC CAGATTTATA TGTTTTAAAT ATGATTACTT GGTGGTAATT AAAGAAAAGA      360
TTGGATGATT TAGGCAGATC TCGAG                                          385

```

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC      60
TTTTCTTCTT TGCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTCGTCACT      120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA      180
AACAAAAATT GCAACAACCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA      60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA      120
AGTTTTCCTT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTA CCAATGAAAG      180
AGGCTGGATA ACCTACCAGG GATTCTTTC CAGTGGACG CTCACGACTT ATTTAGATGT      240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC      300

```

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAACAAAAC	360
TCAAAGAAAT GTGTTCAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTTGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTICA	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTCTGTG TGGTAGCCAT TAAGCAATAG	180
TTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTCG TTCCTTAANA	240
AGTTTTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATTT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTACC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCTCT ACAAAGCTCT	60
TCAACCACAC TCATTTCAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACCTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
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```

CGCTTGGGTC CAGATCTGTA TTCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT      120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAATGTGTA      180
ACTAGTGTGT TTTCAAGCTT CTATTCTTAG GCATGTTACT TCCTTTTGA AGTCAAAACC      240
AACCATCTTT TAAGTAAGAG GGCTAACCAA ATATGTGCCA CACTAACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT      60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTC ATGACTTTAA      120
CAAGAAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA      180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG                          220

```

(2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

```

GAAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAACTT CTAAAGATCA GGTATTGGCC      60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT      120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCCAGC CTGCATCAGC ACCTGCTGAA      180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA      240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG      300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG                                333

```

(2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCAGTGTG GGCTTACCTG TGAGCACAAG      60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC      120
CACCCCTGTA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG      180
TGTGCGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG      240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC      300
CCCCGGACCA CTCGAG                                316

```

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTTGTA      360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAAGC AGCGATACAT      480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG                               517

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGCTCCCCG ATGGGTCCTG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGA CTGGTGA      120
AGCCTTCGGA GACCTGTGCC CTCACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT      180
ACTGGACCTG GATCCGGCAG CCCCCAGGGC AGGGACTGGA GTGGATTGGA TATTCTTATT      240
CACCCGGGAA CTCCAAC TAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGAACCCCG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT      540
CAAGGACTAC TTCCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGCACACC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAAC CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC                               829

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTTG GTAAGCTTTA    60
ATATAACTAC CCTGTTTTTT GAATACAGAT AATGCAAAAG AAAACCATTT TATACTCGGC    120
TATATACCTT CCACCACTCG AG                                         142

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTCTT ACTCAAATAG    60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA    120
CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC    180
TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAGCTGG TGGTTGATGT    240
CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT    300
GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC    360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA    420
AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA    480
GCCGGGGGAG GAGGGGCGGC GGCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG    540
GCCTCTTGG CCGAA                                         555

```

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGCAGG GACTTAATCA    60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCTC                                         97

```

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT    60
AAAACGTAAT CAGGAACTTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA    120
TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTGAGCTAG    180
AGATTCTGAA CAAGTTGCAG AATTAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA    240

```

```

CTCACAATCT GTGGAGATCA CCAAACCTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC 300
AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA 360
AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA 420
TGAAATTAAA GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA 480
TAGTACC 487

```

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

GAATTCGGCC AAAGAGGCCT ACTGGGCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA 60
ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT 120
GCTGGTGGTG CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT 180
CCTTGCGTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTCGGACGA 240
GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGCGCC AGCTGCTGAG 300
CCCTCTCCAG CGTCTGCAGT GCCTTCCGGT GCAATTCATC TTGCTTGGAC TTCAGGGTGG 360
CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT 420
CCCCGGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAA GTGCTCTGCT TCCTCTAGCC 480
AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC 540
GCAACTTCAC ACACTCCCGC AGCAGGGACA CAGCGTAGGC TGAC 584

```

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC 60
TTGTCCCCAA CCAAGAGTGA GTAGTGCACA GAAGTCTCCT GGCACCCTGG GAATCCTGCA 120
TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA 180
GCCCCGTGTA CCAAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA 240
CCAGCCTGTG TTGCAACAT CACTGCCCCG CTTCTAACAG GAAGAGATAC TCTTTTGGGG 300
GTCTTGCAAG GCCCAGGACC AGAGCCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC 360
AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAAGAG ATTTGGCTGT AGTGGGAGGG 420
AGGTTTCAGT GCTTTTCTG GGGACATTGG TGCCTATCTC TATTCTGAGA GTTGTCTCTC 480
TCATAGGACA CCATAAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG 532

```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTCGG GGTCTTATAC AAAACAACA CAGTGAATGA      60
AGGAATAAAT ATTTATTGAA TGGAAAATCA GCAAAGGAAA AAATTGTATA ATTGCAATG      120
ACAAATGGGAA GCACATAGTG AGGCTATGAG TGATTGGGAA ATCATGAGCG TGCAGTGTGTT      180
TGTTACGCA TTTTCGGTTGT GTTTTCAGAA AGTAACTACA ACATAGCATC ATGTAGCAGA      240
ATTGCTGGTT GTAAGCAAAA AGGCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

```

GAATTCGGCC AAAGAGGCCT AATTCCTTTT CTTTTTAATT TGAAGAAAA TCATCAGTCT      60
TGGAATACAG AAGAGAACT AGAAATATAC GTATTTTGTT TCACATTTGA ACAGTCATTC      120
TTGAGGAATA CTCCATACCT GAGTAGACAG CCATGTGGCC ATCGCAGCTA CTAATTTTCA      180
TGATGCTCTT AGCTCCAATA ATTCATGCTT TCAGCCGTGC CCCAATTCCA ATGGCTGTGG      240
TCCGCAGAGA GCTATCCTGT GAGAGCTATC CTATAGAGCT TCGCTGTCCA GGAACAGACG      300
TCATCATGAT AGAAAGTGCC AACTATGGCA GGAAGTATGA CAAAATTGTG GACTCTGACC      360
CTGCTCAGAT GGAGAAATATC CGATGTTATC TGCCAGATGC CTATAAGATT ATGTCTCAAA      420
GATGCAATAA CAGAACCCAG TGTGCAGTGG TGGCAGGTCC TGATGTTTTT CCAGACCCGT      480
GTCCAGGAAC CTATAAATAC CTTGAAGTGC AGTATGAATG TGTCCTTAC ATTTTCTTT      540
GTCCTGGACT ACTAAAAGGA GTATACCAGA GTGAACATTG GTTTGAGTCC GACCACCAAT      600
CTGGGGCGTG GTGCAAGAC CCTCTGCAGG CATCTGACAA GATTATTAT ATGCCCTGGA      660
CTCCCTACAG AACTG                                     675

```

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

```

GAATTCGGCC AAAGAGGCCT ACTCCCTGTT TTGAACAAGT TTTTGTGAGA ATTCTTAGTT      60
TTAGTTTTTG TTTAGCTTAC AACTGAAAA TTTTGAGAAG CATCTAAAAA AATCCACAAT      120
TAGTGCAAAA AGAGGGGACA ATACTTTAAG TCATTCCTTC TATAAAAAGA ATTAAGGTTA      180
CTAAATGCCA ATTTTAAAGC AAATATATAG TTTCTATTG GCCTTCTGAA AGACAGCAGA      240
TATAAAAATA GTTCAATATT AGGTTTAAAC AGGTTTGAAC AACACATGTA CTATCAGCTT      300
TATTTTACCT GCAAAAATAT TTTAGCTACA CTTGGAAAAA AATAAATTG AGAATATAAC      360
TTCACATTTT TAAGGCCAGA TGCAAGAATA CTTATTTAGG CCTCTTTGGC CGAA          414

```

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT	60
TAATTGGTA TGCAATCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC	120
CTTAGTGTA GTCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATCCATT	180
GTAAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT	240
CCTGTTAGTG TTCTACAATT CCTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA	300
CAGACAAGTG CATAACTCTT AAACAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCATTT TATTTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG	240
ATGTTTACTC TTTACTTTCA CGGCGGAATC ACCATCTGAG GATCCCAACC GATGGTTTAC	300
TTGTGTCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAATAAGC GCTTGCAACA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA	540
GTTTCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCT TGGGAGAAGA	720
ACTGGATATT GTTGTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTACCT ATACCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```
GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTTGCG TTTTCCACCG TGCACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTTATTTTCAG TGTTCCTCCC ACTGCCAACA CACCCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGACCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAAAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGGCCA TCCCTAGCCA CATCGGCTG CGCACCCATC TCTCGAG      587
```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```
GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTTCTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCCACA CTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGGTGCT AAAACACAAG AGGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCAC TAATGGGAAC CTCCTCTAGG GAGAGTGATA CTGCACCTTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTGG AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCTTT TGGACAGTAG ACTGTAACCT CGAG      534
```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```
GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```
GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCCTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCAATGCTT AGCACCCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCTGTGTA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTGG ACCATTCCCG GGTGGCTCG AG                          582
```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```
GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCTAGCCTA      60
AAATTCATTC CCGCGCTCA CTCAACATCA TAGTTCCTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATT TCTGCTTTT TTTTCTTCTA CTATTGTTGC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCTAAA ATCTGTTCTT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTT GCACCAGAGA ATTAGAGATG      360
AACCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATT AACTCTCAA ATCAAGATGT      420
TTCTACCAT TTCCATTACT ATTGTCCCA GCTTCTCGA G                          461
```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```
GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTACCC      120
TACGTCTCTC GAG                          133
```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAACTCTAC TGATACCAAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCA CTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCTT      240
CCAGAGAACC TTATAAGAAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTCTTCTG ATGAGCAAGG GAACAACACT GAAAATCTCG      480
AG                                                                                   482

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AAACCTCTGC      300
TTTATGGTAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TTAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTAGTCAGT AAAATGTTAG      420
AAATCAAACAT ATAAGAAAT TCAAGTCCTT TATTTTGTGT CTTGGGTATA TGTCATTATT      480
TTAAATTCCA CAGCTCTCGA G                                                                                   501

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTCG CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTG      120
GGGCCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCACCTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGCGAGTCC AACAGCATTG      300

```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAT TCCGTCTTCA AGAAGAAACA      60
CCCCGTTGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAG      120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG      180
CGCCAGTGGC AATGCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG      240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT      300
AAATCATCAG TGGCTTAAAG AACAGATGT TCCTCAGAAA TCCAGACAAT TATATGCCAT      360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCAGCAT      60
TACCCGTTGA GCCACATATT GGAAGAAATGA TTCTTTTGG AGCACTGTTC TGCTGCTTAG      120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTCAAAGA TCCATTTGTC ATTCCACTGG      180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC      240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGAAGAGGC TAGGCGACGT GGTTCAGAT      300
ACGAAAAGGA CACACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCATTT GTGGTGTGG CTCTATTGTC      60
TGTCACCTCAA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA      120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC      180
TGCAATAGAC GTGGAATAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC      240
TGGAATGCTC AATGTCAAAT GGGACCGGAT TGCCCTGCT AGCAATGTCT CCCCACTGT      300
GGTCCTGCGC CCTCTCAAGG CTGTTATTT CAACTTCACC TCGGCAACAA TCCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC GAATTGGCCT CAGTGTAGTT AAAGGGCAGA AGGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAG CTTTCTGACA AGATAAAGGA AGTCACCAA ATTTCTTTTT TTAATTTGTA      480
TCTAATCCTC AACAACAAAC CAAACTCTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGAAAT GTTTGATGCT ACTCTGAAAG ATCAGAACT      60
GAGCTTTTCTAG TCGGCTCCAG GTACTACCAT GTTCTGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTGCTCTCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCTCT      180
GTGGTTTCTA AGGAATTTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTG      240
GCCAATATAT AGGCATCTCC GAAGATTAT TTTGTGAGTG ATTGTCTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAGAGT GTGCTGCCTA ATTTCTTCTC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTCA AGAAATCTTT GAAGCCAAA GACAAGAGTT      180
CTATGATCAA TGTCAGAGGG AAGAAGAAGA GTTGAAACAG AGATTATGTC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTCGGTACA ACAAGAGAGA TAAACGATGA AACCGTTACA TTATACAGCT      60
TCAGCACTGG CGCTCGGACT GCGGTTAATG GGAATGCAC AGGCAGTGAC GACCATTCCG      120
TTCTGGCATT CTATGGAAGG GGAAGTGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTTT      180
AACGCCGAAA ACCCGGATTA CAAAATTGTA CCGACCTATA AAGGCAACTA CGAAGAGAAAT      240
TTAAGCGCGG GGATTGCCGC ATTTCGTACC GGCAACGCGC CGGCTATTTT GCAGGTTTTAT      300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACCGGTGTA TGACGTGTTT      360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTGTGTC CGACGGTTTC AGGTTACTAC      420
TCCGACAGCA AAACGGGCCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCCGTTCTC      480
TATTACAACA AAGACGCCCT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC      540
TGGCAGGATC TGGCGGACTA TGCCGCGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC      600
GCCAGCGGCT GGCAGGGCTG GATCCAACCT GAAACTTTA GCGCCTGGAA CCGTCTGCCG      660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCG      720
GAGCAGGTGA AACACATCGC CATGCTCGAG                                     750

```

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTGAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTCTGTG TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGTCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGT GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                     490

```

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCGGCC	TTCATGGCCT	ACTTCTGGAC	TCTATAGAAC	CCACTGCCTC	CTGATGAAGT	60
CCCTACTGTT	CACCCTTGCA	GTTTTTATGC	TCCTGGCCCA	ATTGGTCTCA	GGTAATTGGT	120
ATGTGAAAAA	GTGTCTAAAC	GACGTTGGAA	TTTGCAAGAA	GAAGTGCAAA	CCTGAAGAGA	180
TGCATGTAAA	GAATGGTTGG	GCAATGTGCG	GCAAACAAAG	GGACTGCTGT	GTTCCAGCTG	240
ACAGACGTGC	TAATTATCCT	GTTTTCTGTG	TCCAGACAAA	GACTACAAGA	ATTCAACAG	300
TAACAGCAAC	AACAGCAACA	ACAACTTTGA	TGATGACTAC	TGCTTCGATG	TCTTCGATGG	360
CTCCTACCCG	TTTCTCCAC	TGTTGAACA	TTGCAGCCTC	TGTCTCTGTC	TCTAGGATCC	420
TCGAG						425

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCGGCC	TTCATGGCCT	AACCAGAACT	AATTGCTAA	GTCTTTTGT	TAGTCCTGCA	60
AGACTGATGC	TTAATACACA	GTCTGTTCTC	CTGTGTCTAG	GTCAAGAACT	CCAGTTTGCT	120
TTTCTGTTTT	GTGTCCTGGT	AGCAGCTGTT	GAGTAACTTT	CATTGGAGGT	TGGGAAGGAA	180
GTGAGGAGAA	AGTGTCTTG	TTTAGTGTTT	TATTCCTAT	AATAGGATGC	TGCCTAACCC	240
AGTTCACTC	TATGTCCTGT	TCAGTGAATA	TTCCGGGTAA	TTGAAAGAAA	ATATAATGGA	300
TGGGCTCCAT	TAAAACCAGC	TCAAAAATAA	ATTCTTGTC	GTAAAGATTT	CTTGTCGAAGA	360
TGTCTTGAT	TGCACTTT	TTGAGGAAAG	ACAGTGATAA	TAGTTAAAGA	ATGTTGATAA	420
AATTGAAACA	TTTGTTGTG	GAATTGTGTG	TGGTACTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

GAATTCGGCC	TTCATGGCTT	ATGGACAAGG	AAGCATTGAG	AGCATGGTGT	CATCTGACTC	60
CACATCACCA	GATTCTTCTT	TAACAGAAGA	ATCACGTTCT	GAGACAGCCA	GTAGTTTATC	120
CCAGAAGATT	TGTAATGGGG	GATTATCTCC	TGGTAACCCA	GGAGATTCTA	AGGACATGAA	180
GGAAATTGAG	CCCAATTATG	AAAGTCCCTC	TAGTAATAAT	CAGGATAAAG	ATTCATCACA	240
GGCTTCCAAA	AGCTCAATAA	AAGTTCCAGA	GACCCACAAA	GCAGTCCTTG	CTCTCCGATT	300
AGAAGAGAAA	GATGGCAAGA	TTGCTGTACA	AACTGAGAAG	GAAGAAAGTA	AAGCCTCTAC	360
AGATGTTGCT	GGGCAAGCAG	TAACCATAAA	CCTTGTCCTC	ACAGAAGAGC	AAGCAAAACC	420
TTACCGAGTT	GTGAACCTGG	AACAGCCATT	GTGCAAGCCA	TATACTGTG	TGGATGTGTC	480
AGCAGCCATG	GCCAGTGAGC	ACCTCGAG				508

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCT TCATGGCCTA GGTTCCTGT ACATGGAGAT TAAACTGTCT TCCAAAGTGA    60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC    120
AAGGGAAGAA AATCATTTC TCCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG    180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT    240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCTGGCG    300
ACCTGACGCT GCGGAGGCTC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA    60
CAAGCAGTTG GACAGATATT CTACATTTCC TCATTTCTCT ACACCGTCAA TTACATCTGG    120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG    180
GTGATAGATT ATACTTGTCT AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT    240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GAAATACTA GTGAATGTTT CCAAACTTC    300
AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA    360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG                                         396
```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTTTGTA TTTCTTTTC    60
TGTCCCAAAC AGTTTCCCCC ACAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC    120
CTTCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCCTCAGA AACGAACAAT CCAGAACCCA    180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCAT GCCTTCCCTG AAAACATTAA    240
ACATTCTCTC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCATCCT GCTCCACAGC    300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCC TTTCCACCC GCGGCCCTGC    360
CTCCCTCGAG                                         370
```

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

```
GAATTCGGCC TTCATGCCTA GAGAACTTGA AGCTTTGCGG CAGGAATTTA AAAAGAAAGA    60
CAAGACGTTG AAAGAGAATT CCAGAAAGTT GGAGGAAGAA AATGAGAATC TCCGAGCAGA    120
GCTACAGTGT TGTTCTACAC AACTGGAATC CTCTCTCAAC AAATACAACA CCAGCCAGCA    180
AGTCATCCAA GACTTGAATA AAGAGATAGC CCTTCAGAAG GAGTCCTTAA TGAGCCTGCA    240
GGCCCAGCTG GACAAAGCTC TGCAGAAGGA GAAGCACTAT CTCCAGACTA CCATCACCAA    300
AGAAGCCTAT GATGCATTAT CCCGGAAGTC AGCCGCCTGC CAGGATGACC TGACACAAGC    360
CCTCGAG                                         367
```

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

```
GAATTCGGCC TTCATGGCCT ACGGCTTCAT AGTAACTCTT TGCCATATCT CTAGCCAGCT    60
GCATAAAACG TTCGCCATCA GATGGAGACA AAAGGTTTAA AATACGCCCTA TAACCATCCA    120
TGGCCATTTT ATGATCACCC ATCTGTTTCA AAAGGCTTGA TCGCTCCCAC AGATAACGGA    180
CATTAGTAGG TTCATATTTA AGAGCTTTTG TATAGCAAAA AATAGCCTGC TTAATATTGT    240
CTTGTTCCAG AGACATTCTT GCCAGTCTAA CCCATTCTTC TGTGCTACTG GGATTTAAAT    300
GCGCAGCAAT CAACTCAAAC TGCAATGATT TTTCCATGTC ACCTTGGTCC TCATATATCA    360
TGGCTAGAGT AGAGAATGGC TCATAAGCCA GAGGAGCTTG TCTTATGATT TCCATGCACA    420
TCAATATCGC CTCTTCACGT TCTCCTCGAG                                         450
```

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

```
GAATTCGGCC TTCATGGCCT AACGAACTG ACGTCTACCT CATGGGGCTG CTGTGTGGGT    60
TTGGGAGGCA AAAATCTATG AAGGGTTTTT TGAAATCCCA TAGGTGCCAC ATCTATGAGA    120
TGTTTGATAA ATGTGAATAT GCTTTTACAT TTGGGCTTAT CTAATTTGCA ATAAGAGAGC    180
CTCTCTCTAT CAACACCAGC TTCTCTCTCG GGCTGTTTGC TCAGGGAAGG CAAGAAAGCC    240
ACGTGCTGGC CCTCTGCCTT CTCTAAAGTG CTGTTGGAGC ATGGAGGAGC TGGAGGAGAT    300
GGGGATGGAC TGACAGCTAA GAGGGCGGCT GCTGGGACTA GATAGTGGAT GAAGAAAGAA    360
GGACGAGGAA GCCGTGGGGC AGCCTCTTCA CATGGGGACG AACTCGAG                                         408
```

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCCTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAAGTTCG      540
AGCGCGAATT AAAGAAGTCG AG

```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTCT GTCCGGCCGC GGCTTCCTGT TCAGAGTCCT      180
CCGAGCAGCT CTTCCCTTC AGCTTCTCCT GCTCCTCCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCAAAC AACTTTGCCC GGTCAATTCCA      300
CCCTATGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTTGGTT TTTTITTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGCGGCC      180
CATTTCCGCC ACTCCGGATT CGGGGATCTG AATCCGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GCGCTCGCC CAATCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCGCCCTT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCCTC GGTGACCATT      240
GATGGTGTGA CTTACGGATC TGGAACTGCA AGCAGCAAAA AACTTGCGAA GAATAAAGCT      300
GCCCCAGCTA CACTGGAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAAGACA GTGAAGAACT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GGGACGTTGG TGTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTGGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT      120
GTAGCATTCTG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

GAGTTTGTG GGCCTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTGTA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCCGGCG CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC      420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
TCTAGACCTG CCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTCCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTT TAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470
```

(2) INFORMATION FOR SEQ ID NO:256:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC TTCATGGCCT AATTTGTAT TTTAGTGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAATC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTT TTCTCTTCA GTCGTGTTGT      240
GTGGTTTGTA GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388
```

(2) INFORMATION FOR SEQ ID NO:257:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAAACAGGGC TCAAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTG      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGAACA AATCCGAGA CGATGATTAT TTCCGCACCT GGAGTCCAGG      240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG

```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCCGCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTCGTT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAGTA CGAGAGTGTG      300
GGCTGACAAAT AAATCCTTTT ATTCTACCCT CTTCTGTTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC

```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTTGGCCTT AGCCAAAATT CTGTTGATT CAACGTTGTT TTATTCATT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCACT CCAATCTCT AAGGCGAGTC ATTCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

```

GGCAGTCTAA AACCCACATC TACCATTTC ACAAGCCCTC CCTTGATCCA TAGCTTTGTT 420
TCTAAAGTGC CTTGGAATGC ACCTATAGCA GATGAAGATC TTTTGCCCAT CTCAGCACAT 480
CCCAATGCTA CACCTGCTCT GTCTTCAGAA AACTTCACTT GGTCTTTGGT CAATGACACC 540
GTGAAACTC GTGATAACAG TTCCATTACA GTTAGCATCC TCTCTTCAGA ACCAACTTCT 600
CCATCTGTGA CCCCCTTGAT AGTGGAACCA AGTGGATGGC TTACCACAAA CAGTGATAGC 660
TTCCTGGGT TTACCCTTA TCAAGAAAA ACAACTCTAC CTACC 705

```

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTCGGCC AAAGAGGCCT ACCTTACTTG AGTCCACAGG CAAGGCCCAA TAATGCATAT 60
ACTGCCATGT CAGATTCTTA CTTACCCAGT TACTACAGTC CCTCCATTGG CTCTCCTTAT 120
TCTTTGGGTG AAGCTGCTTG GTCTACGGGG GGTGACACAG CCATGCCCTA CTTAACTTCT 180
TATGGACAGC TGAGCAACGG AGAGCCCCAC TTCCTACCAG ATGCAATGTT TGGGCAACCA 240
GGAGCCCTAG GTAGCACTCC ATTTCTTGGT CAGCATGGTT TTAATTTCTT TCCAGTGGG 300
ATTGACTTCT CAGCATGGGG AAATAACAGT TCTCAGGGAC AGTCTACTCA GAGCTCTGGA 360
TATAGTAGCA ATTATGCTTA TGCACCTAGC TCCTTAGGTG GAGCCATGAT TGATGGACAG 420
TCAGCTTTTG CCAATGAGAC CCTCAATAAG GCTCCTGGCA TGAATACTAT AGACCAAGGG 480
ATGGCAGCAC TGAAGTTGGG TAGCACAGAA GTTGCAAGCA ATGTTCCAAA AGTTGTAGGT 540
TCTGCTGTTG GTAGCGGGTC CATTACTAGT AACATCGTG CTTCCAATAG TTTGCCTCCA 600
GCCACCATTG CTCTCCAAA ACCAGCATCT TGGGCTGATA TTGCTAGCAA GCCTGCAAAA 660
CAGCAACCTA AACTGAAGAC CAAGAATGGC ATTGCAGGGT CAAGTCTTCC GCCACCCCCA 720
ACACTCGAG 729

```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTCGGCC AAAGAGGCCT ACTACCATGT CCTCTTGAG CAGACAGCGA CCAAAAAGCC 60
CAGGGGGCAT TCAACCCCAT GTTCTAGAA CTCTGTTCTT GCTGTGCTG TTGGCAGCCT 120
CAGCCTGGGG GGTCAACCTG AGCCCCAAG ACTGCCAGGT GTTCCGCTCA GACCATGGCA 180
GCTCCATCTC CTGTCAACCA CCTGCCGAAA TCCCCGGCTA CCTGCCAGCC GACACCGTGC 240
ACCTGGCCGT GGAATTCTTC AACCTGACCC ACCTGCCAGC CAACCTCTCT CAGGGCGCCT 300
CTAAGCTCCA AGAATTGCAC CTCTCCAGCA ATGGGCTGGA AAGCCTCTCG CCCGAATTCC 360
TGCGGCCAGT GCCGAGCTG AGGGTGCTGG ATCTAACCCG AAACGCCCTG ACCGGGCTGC 420
CCTCGGCCT CTTCAGGCC TCAGCCACCC TGGACACCCT GGTATTGAAA GAAAACCAGC 480
TGGAGGTCCT GGAGGTCTCG TGGCTACAG GCCTGAAAGC TCTGGGGCAT CTGGACCTGT 540
CTGGGAACCG CCTCCGAAA CTGCCCCCG GGCTGCTGGC CAACTTCACC CTCCTGCGCA 600
CCCTTGACCT TGGGGAGAAC CAGTTGGAGA CCTTGCCACC TGACCTCTG AGGGGTCCGC 660
TGCAATTAGA ACGGCACATT CTCGAG 686

```

(2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTCTCCAGT GGCACGTTTG AACAGGTCAG      240
CCAACTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATCCCT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571
```

(2) INFORMATION FOR SEQ ID NO:264:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTC CCTGAAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCCTCC ACAATTCTTA CACCTGTCTC      300
CCCCATACTC GAG                                     313
```

(2) INFORMATION FOR SEQ ID NO:265:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCAGTTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC CAGAAACAGG GAGTAAAATG GGAAGTAAAC      180
TCAGTCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343
```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCATTTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATGTTGATCT CTAAGCTGGA AAGACTCGAG                               340

```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCG CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGACTGGGTA CTCTCTTAGA      240
GAAGAACTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTGCT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG                               367

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTC TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG                               320

```

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCAATCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATTACG      420
GAGTTCCAGG CCCAGTCTCC AACTGACCTC CCTCTGCTC CAGTGCCCA TGCTAACAGG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT                                                                                   542
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATTG TTTACTCCAG CATCTTTAAG TATTCTGTGA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTCTT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGGAAACA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTCATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                                                                   613
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTATTTCT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG 180
TCTAATGACC GTGAATTGGA TAAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT 240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCC CGGGG CATGCCATCA ACTACCACAC 300
AGCCAGGGTT AATTGTGATT TCCCTGTAGG GAACTTTCAC AGGAAAACCC ATACCAATAG 360
CTTCACCAAA TTTCCGACTA AAGAGGTCAT TCACTTGTTC TCTTAGCTGT CTAGCTTTTT 420
CAACTTTTGA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT 480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTTT CTGGGAGGGC 540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA 600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG 660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT 720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG 763

```

(2) INFORMATION FOR SEQ ID NO:272:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG 60
TATTTCTTA ATAAGAATAA AATGAATTTA AACTGATTC TG 102

```

(2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC 60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG 120
TGAAGGGAAG GCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA 180
GGAAGAGAGT CCCCCTCCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA 240
TGGAGGAGAC AGTGACTATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC 300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA 360
ACTCACTGAC TGGAATAAAC TGGCTTGTCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA 420
AGTTCTGATC AAACACCAGC AGCTGTCAGA CCTGCACAAG CAAAACCTGG AAATCCACCG 480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA 540
GTTTAAAGGA ATAGGAAATC TCGAG 565

```

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG	120
AAGTTTTGTA AATAAATTTT CTGATAGGAT AACTAGATT CCCTATGATC TCTTATTAT	180
TTATCATT	188

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTGCGCAG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTCGTC	180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC	240
GTTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG	360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCAGGCCCT GCATCTGTTC	540
AAGCATAACC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTTGA GTCTTCTATT GCTGTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAAC	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAACAACAG AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCTT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTAAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTTT TCTTTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCTATA GGTGGGTATA      120
TTCGCCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTTCTTCAA GCTGAAAAGT GCTGTGGGTG      360
AACCTGCTTA CACAAATTAT GTTGGTGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTT GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCGGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TGCGAGGGAG ACTCTGGCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCACCG      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CCTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAAACAGAG AAAGCCGGAG AACCCAGGA GGGCCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCCAATGAAG AAAGAATACT GGCACCTCTT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCG CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGCGTGTG TGCTTTTCAT TATTAAC TTC      360
AAATCCAGT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAACT      420
GGAGGCCACC TGGTCTCCAC TTTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCCG AGTAGATTG AACTGGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAACCTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCCT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAATC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTGTAGGA GGTTGTATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTCACA TATGACACCT GGGTGTGTTT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTTGCCGCT AATTCTGAAC TTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACCGCCC CCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTC ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAAACG CGAG                                         194
```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```
GAATTCGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAATA GTGCAAATAT   60
CTTACTGGAT GAAGCTTTTA CTGCTAAAT ATCTGACTTT GGCCTTGAC GGGCTTCTGA   120
GAAGTTTTCG CCAGACAGTC ATGACTAGCA GAATTGTGGG AACACAGCT TATATGGCAC   180
CAGAAGCTTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT   240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG     296
```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```
GAATTCGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC   60
CATATCCATT TACCCACCAT TGGCAATTG AAAGGACCAT CCAGACCCCC ATAGGATCCA   120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTIONTCC CAAGGTCGTC ACCAAGCCAG   180
GCCATATCAT TAACCCATA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG   240
ACCTGTCTGT CATAACAGAG AATCCAAAAC GAATCACCAC ACGTCACAAA AAACAGCTGA   300
AGAAATGCTC TGTAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACTT   360
CCTTTGGTCC AGTTTCTACT TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA   420
TGTAGTTAAG CCACATTTTA AAAATAAAGG CTCGAG     456
```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```
GAATTCGGCC AAAGAGGCCT AAGGTCGGCC TGTTCATCTT GATTAGCATC CAGGCCTTGG   60
AATATTTTCAT CAATGACAGC TTTATCTTTG ATATTCTTGA TGGTGTTTGC AAGCTCCTTT   120
GTAAGCAGCT GCTTCAGCTC ACCCCTCGAG     150
```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACCTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTCGAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCTTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
AATTAGAATA TGAATTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAACTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTAC TTTCTGCGG TCAATTTTT TAATGATCTA 180
TTTAAAATTT TTTCAAAATG ACAACTACTA TGGAATACTG AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTCTG GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAATTGGG GATGCCAGTC GTGTTCTGGT CTCTGGTCAG 300
GGCCTTCAG AAGGCCACAC CTTTGAGCCT GCAGAGTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60
GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120
TAAGCATCTC ACTGTTCCCT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
TGCCGCTCTG TGCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240
GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATGTGCA GAAACTGAAG 60
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTGGGCTT TTGCGCAGCT CATTCITGGA 240
ATCCCAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC CTCATGGCC TAGGTTTCTC CGTGTGGTC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATTT TCTTCTTCTC AATCTGGTCT TGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTTCA AAATGTACCT TATATTTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAAGAGA GTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GTGTAAAACC AATGCCAGGA AAACCAAATA CAAAAACCC TCCACGGAGA GGTCCCTCTGA      60
GCCAGAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTA CTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302

```

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```

CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCCTGCCACA      120
GAGAGACGTG GATCCTTCCC TTTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC AGTGACGGTG GTAGGGGAGG ACTTGGTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAAACAT GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```

GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCTGCGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGGTCA AGGTCAAAGG GGTGCTCTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCCCGCATTG GAGCCACAT CGCCACCCCA      300
ATCTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```

GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCCTG TCCAGTGGAA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAAGGGA GGTCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

```
GAGCGACCTT TGGAAATAGTT AAGCACAGGT CATTGTGGAC ATGAATTCAG GCCTCTGTAC      60
TAAAAATCTAT TTCAGGGAAT GTTCTGTCTA GTGATTTGCT CACCATTGGA TATATAATGA      120
ATTATAGGAC AAGTATAAGC TGATCTGCTA TAGCTGTCCA TCAGAGAGAA TACACGTGGC      180
TATAACATCT ATAACAAAAC GACGATTCCT CTACAAGAGG CTGTTTCTCA CTGCTAACGT      240
TGGTGTCTCT GCGGTGGGAA GAAATGCACA GCGGTGCATG GCATGCACGT TCAGACAGCT      300
GCATTGTAAG AGTTCTGTCA TGCAGTCTGA AAAGGGAAGA AACAGGATGG CTTTCTGTAG      360
CCACACCTGT GAGGCGTGAT GATTGTTGTA TTATTAGATT ACTGATTTTT CTTTCTGAA      420
AATACATTTG AGTTTAAATC ACATCTGTGG AACTCGAG                                458
```

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

```
GGGATGCCTG TTCTGGGGT AGAGAAGTCA GGTAGCCCAG GGCCCGCACT CTCAATAGAC      60
CTTCAGAGAA AAGGCATCGA GGTAAATGCC GCACTCGAG                                99
```

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 569 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

```
GGTCTAACAG TAACACTACT CAAGAGACCC TGGAAATAAT GAAAGAATCA GAAAAAAAC      60
TGGTGGAAGA ATCTGTAAAC AAAACAAGT TTATATCTAA GACTCCAAGT AAGGAAGAAA      120
TTGAGAAAGA ATGTGAAGAT ACCAGTTTGC GTCAGGAGAC ACAGAGGCGG ACATCTAACC      180
ATGGTCATGC CAGGAAAAGA GCCAAGTCTA ATTCCAAGCT AAAGTTGGTG CGTAGCCTGG      240
CAGTGTGTGA GGAGTCCTCC ACCCCATTG CTGATGGGCC ATTAGAAACC CAGGATATAA      300
TTCAATTGCA CATCAGTTGC CTTCTGACA AGGAGGAAGA AAAGTCCACA AAAGATGTCT      360
CTGAAAAGGA AGACAAGGAC AAAACAAG AAAAGATCCC AAGGAAGATG CTGTCCAGAG      420
ACTCCAGCCA GGAATATACG GACTCCACTG GAATAGACCT ACATGAATTT CTTGTAAATA      480
CACTGAAAAA GAACCAAGG GACAGAATGA TGCTGCTAAA ATTAGAACAG GAGATTCTGG      540
AATTTATTAA TGACAACAAC CCACTCGAG                                569
```

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC	60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG	120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTAC ACTGAAGTCA CACCCATTGG	180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA	240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG	300
GGGCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG	60
GGAAGAATGC ACCCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG	120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA	180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG	240
TATCCCGGGC CACAACCTCC CAGCTGACTG ATGTCTCCGA GGATTTGGAC CAGCAGAGCC	300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT	360
GGCCCTCTCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT	420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGGCGCTC TCATCCCCC	480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT	540
CCCTGGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC	600
TGCCCGGCAC CCTGTACCT CCACCTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCCTT	660
CCATTCTCCC ACCTGATCTC GAG	683

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT	60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA	120
ATAGGCAAAA CCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC	180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT	240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAAA	300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG	360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT	420

```

TAAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA 480
TCTCCAGTA TTTGAATTTT TAATAACAAT CTTTTATCA TAAACTATA TTAAATTAAA 540
CTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAAACCT AATACATTGT TTTCTACTTT 600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG 653

```

(2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA 60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT 120
GGCAGAGTTA GGTCAGAGGC AACTTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT 180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTA TTGTGCTTAT CTGGGAGGGA 240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC 300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT 360
GTTTTACTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC 420
TCACCTCCCT CCGCGCTCG AG 442

```

(2) INFORMATION FOR SEQ ID NO:306:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTT 60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA 120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT 180
GAAGGGTCTT TGAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA 240
TCTGCCCAAG CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGGTT 300
GCATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA 360
ACAGGGATTT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG 412

```

(2) INFORMATION FOR SEQ ID NO:307:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GGGGTTGTCT GAGGCCCAAG GGTCTGTATA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG 60

```

```

CTTGCCCTT GTTGCAGAAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCAGGGC 120
AGCTCGCCCT GCTTGGCCAG CTTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG 180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGCAGGGA CTTTGGATGT GTTCTCGAG 239

```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT 60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA 120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT 180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG 240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTCTGTC TGCCGTGTAC 300
GACCCCAAGA GCTGGGACAG GGC CGGCCG GGCTCCCTCC TGCACCTCTA CACGCCCAAG 360
ATGGCTGTGA TCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA 420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA 480
GCCAGTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG 533

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCC AAAGAGGCCT ACCCTAAAC ATTTATTICA AGGAGAAAAG AAAAAGGGG 60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT 120
GGTGGGATTC TGCTCGTGTT CCAAATCATC GCCTTTCTGG TGGGAGGCTT GATTGTCCA 180
GGGCCCACAA CGGCAGTGTC CTACATGTCG GTGAAATGTG TGGATGCCCG TAAGAACCAT 240
CACAAGACAA AATGGTTCGT GCCTTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG 297

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA 60
GGGGGTCCTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT 120
GGCAAAGTTT TCTGTTAAGC CCCAGTTCT CCAGGTGCGT TACTATTCTT GGGATCATGG 180

```


GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240
ACCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:311:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTAA TATTTTAATA 60
 TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAAGTC TCCTAACATT 120
 TCTCTTCCTC AGTTTCCTAT TGTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180
 GAGTTGGTAG ATACATTCTG GATTTCATT TACTTTAGAT AGCAGGTTTG GCACTTTAAA 240
 TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300
 GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60
 ACTCCATGCC CTTGTCCGAT GGTTCGCAAC TCCGATTTG CACACCGCTC CACCGTGCCC 120
 CCCAGCGCAC ACCCATTCAC ACTCAGGCCA ACACTCTCGC TGAACACTTT TATAATTGTT 180
 AGGCGTGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240
 TTTACTTTTG CATTGCGGTT ACCTCGAG 268

(2) INFORMATION FOR SEQ ID NO:313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60
 GTGGTGGA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCTGACCCC GCGGCCGGAC 120
 GACCCAAGCC CGCTGAGCAG GATGAGGGA GACAGAGATG TCAATGACCC CATGCCCAAC 180
 CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240
 CATGTTGAAG GAGTAGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300
 GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGAAA GGAAGTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAACT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTCTACTCCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                     514

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAA AATAAATAT CATGCCCTTC TCGAG                                     215

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCGG      60
TCCTTGGA CT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAAT GTGAAGACGG      120
CGTCCGACTG CGGGGCACTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAGACG TTGTCACCGC AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTA AGGAGAAATG AGCCGTCCTG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCCTCC	540
TCTACCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAACATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCTTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTTGGCCA	GTACTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT	TTCCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCTTCTAG	TTACTCTGGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCTTAC	TTTTCACTCT	TTCTCTGCCT	GGAGTGTCT	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTCCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTTCGAC	ATTACCTGAG	AGTCTTGATT	TTAGGCTTGT	TTTTTGTAAT	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGTCCACC TGTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGCTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGGTGTCT CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCATCTCT CAGATGGGTT CCAAAAAGAA      60
GCCCAAAATT ATCCAGCAAA ACAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT      120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA      180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGAACA GAGCACAATA AGAAAGGAAC      240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA      300
ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATCTCTG GCTGCCTCGT      60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTCTGGG AGCTTCGAAG      120
ATGGAAAGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG      180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA      240
ACCGGCGCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA      60
TGGCTGTCTT CTATTTTCAC TCACAATTTT AACACATTTT GACTTGCTCG TGTCACCTAG      120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTTCCTTG CCGTCTTTGG TGCTGTTGAC      180
CTCACCTTTT CTGGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTGCAGCC GCCCCTGGTT      240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCTTCTCA CCCACCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

```

GAATTCGGCC TTCAGACTTG AAGTGGAGAA GGCTACGATT TTTTGTATGT CATTTTGTGT      60
AAGGGCGCAG ACTGCTGCGA ACAGAGTGGT GATAGCGCCT AAGCATAGTG TTAGAGTTTG      120
GATTAGTGGG CTATTTTCTG CTAGGGGGTG GAAGCGGATG AGTAAGAAGA TTCCTGCTAC      180
AACTATAGTG CTTGAGTGGG GTAGGGCTGA GACTGGGGTG GGGCCTTCTA TGGCTGAGGG      240
GAGTCAGGGG TGGAGACCTA ATTGGGCTGA TTTGCCTGCT GCTGCTAGGA GGAGGCCTAG      300
TAGTGGGGTG AGGCTTGGAT TAGCGTTTAG AAGGGCAAAC TCGAG                          345

```

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

```

GAATTCGGCC TTCATGNCCT ACCTTTCCGT CCGTTCTTTC ACGCCTTCCT CCTCATTTTC      60
CTTCCTTCTA TTTTCCCTTC CCTCTTTCGG CTTTCCTGCC CCGTTTCCTT CTCCCTCCC      120
TTCCTCCTTC CTTCCCTTCT CTGCGTTCTT CCTCTCTCCT TTGTTCCCTC CTCCCTCTCC      180
CCACTCCCTT TTCCTCTCCT CTTCCACCC CAGTCTCCTA CTCCCCAGTC CTCCCATCCC      240
CATGGAACAT ACACCTGCTT TGTCTGGGAG CCACGTTATT CCTGCCAGCC AGACCTGGC      300
CAGGAGGATC AGGGTCACGG TCAGCTTGGG CCGAGAACCC TTCACATGAG ACAAGCTCCT      360
CTGCCAGGGT TTCCTGTGGG AAAGGCCCCA CTTCCCGACC CTCCTGGGCC ACTGCATGGG      420
GTCCCTCTT CCGCTTCTTC TCCCCTCTCC ACCCGGCAGC CCCCCAGCT CGAG                          474

```

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC AAAGAGGCCT AATTACTCC CCAATATAAA ACATTTTACC TGCGATCTAT      60
GTGTACATAT TGAATGATGT GTAACAATAT CATAATTTT ATGTTCTGCA TTTTTCCTACT      120
TATATATCTT TATTTAAATG GACTTAACTT TACTAATGGA GTAAATTTTA GCTTTCAGAA      180
GGAGTTCTCA CTCGAAGATA AAGAACAGCT CGCTAACCC GAAAGAGGAA TCGATGCTCA      240
GCTTTTAGTT GCACTTCCTA AAGTTGCAGA ATTAAGACAA ATCTTTGAAC CAAAGAAGAA      300
AGAATTCTTA GAAATGAAAA GAAAAGAAAG AATTGCCAGG CGCTTGAAG GGATTGAAAA      360
TGACACTCAG CCCATCCTCT TGCAGAGCTG CACAGGATTG GTGACTCACC GCCTGCTGGA      420
GGAAGACACC CCTCGATACA TGAGAGCCAG CGACCCTGCC AGCCCCACA TCGGCCGATC      480
AAATGAAGAG GAGGAACTT CTGATTCTTC TCTAGAAAAG CAAACTCGAT CCAATACTG      540
CACAGAAACC CTCGAG                          556

```

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTTCTCTTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTGTCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTTATTTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGCCATG	ATTCTGTCTT	TTCAATGACT	GTGGCTTCTA	CTCGAACCAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTCAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACCTC	TGGCCAAGGT	GGTGAATCTA	GGGATGTTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGCAGG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTCTCCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCCGCCCT	CCCTATCTTG	CTGCTCCTCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTTGGT	GTCTGTCTGT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACATTGGGAT TATTGGTGCT GTGACCATGG CTGGCATCAT      60
GGCGGCAGAC AGAAGTGAAT CACCTAGTTT GACCCAAGAG AGAGCCAACC TGAGCGATGA      120
GCAGTGCACA CAGGTGACCT CCTTGTTCGA GTTGGTTCAT TCCTGCAGTG AGCAGTCTCC      180
TCAGGCCTCT GCACCTTACT ATGATGAATT TGCCAACCTG ATCCAACATG AAAAGCTGGA      240
TCCAAAAGCC CTGGAATGGG TTGGGCATAC CATCTGTAAT GATTTCAGG ATGCCTTCGT      300
AGTGGACTCC TGTGTTGTTT CGGAAGGTGA CTTTCCATTT CCTGTGAAAG CACTGTACGG      360
ACTGGAAGAA TACGACACTC AGGATGGACT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

GAATTCGGCC AAAGAGGCCT ACTTATTTTC CTGTGAAAAT GCCTACCACA AAGAAGACAT      60
TGATGTTCTT ATCAAGCTTT TTCACCAGCC TTGGGTCCTT CATTGTAATT TGCTCTATTC      120
TTGGGACACA AGCATGGATC ACCAGTACAA TTGCTGTTAG AGACTCTGCT TCAAATGGGA      180
GCATTTTCAT CACTTACGGA CTTTTTCGTG GGGAGAGTAG TGAAGAATTG AGTCACGGAC      240
TTGCAGAACC AAAGAAAAAG TTTGCAGTTT TAGAGATACT GAATAATTCT TCCCAAAAAA      300
ACTCTGCATT CGGTGACTAT CCTGTTCCCTG GTCCTGAGTT TGATCACGTC GCTGCTGAGC      360
TCTGGGTTTA CCTTCTACAA CAGCATCAGC AACCTTACC AGACATTCTT GGGGCCGACG      420
GGGGTGTACA CCTGGAACGG GCTCGGTGCA TCCTTCGTTT TTGTGACCAT GATACTGTTT      480
GTGGCGAACA CGCAGTCCAA CCAACTCTCC GAAGAGTTGT TCCAAATGCT TTACCCGACT      540
CCTCGAG                                     547

```

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GAATTCGGCC TTCATGGCCT AGGGGAAATT GAGTCAAGAA AAGGTTCAAT ATTTTAAAT      60
GGTAGAATTG ACCGTATGTG TATGTGCTTC TAGAAGTGAT TCAGGAGAGA GGGTGGAATG      120

```



```

GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT 180
TGTGCATAAG TTGAGGGATT GGCCTTGCCT AGAAACATGG ACAATTCGTC TATAGTAAGA 240
AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTTTAA AATTCTTTAA 300
TCAATAGATG TTTCTGATGT ATGGCAGGCA GTAAGCTAAG CAGTTTACAT ACCTGATTTC 360
ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG 397

```

(2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCACC ATTGGTATGT TCCTGCTCTC 60
TGGAGATCCC TGCTTCAAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA 120
GGATTCCCTCC CTGCAGCTGA CGTGTAAGGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC 180
CAACTCCCTG ACTGGGTCCC GGGCCCCCAA GGCTCGGCCC ACTATTCTCA GCTCAGGGCT 240
GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCTGAGGAG GTGTTCCACT CTGGCCACTC 300
CTCGCAACTC GAG 313

```

(2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGCCTCC CAAAGTGCTG 60
GGATTACAGG CTTGAGCCAC CACACCTGGC CTAGTGATTT GTAATTTTCAT GAGCTGTTGC 120
TGTATTGCCT TCCACAGACA GTCAATTTAT AATCCCTCAG TATTATATAA TCAGGAAGAT 180
TCAGTGAATG GAATTTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT 240
GCTTTTGCAA ATCTCCTTAA ATCACATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT 300
TTAGGAGCAA CCTGATCTGT GAGCTAATTT AATGAGTGGA GCCCAGCCTA CATGCTGAAG 360
AGCTCACATG CCTCCTACCT AGTTCCTTAA CTAGGTTTTC ACTCATGCCC ATTTTGTCAT 420
ACTCTTGAAA CCTTCCTATC TTTGCATAGA ACATTATTCT TTCCACT 467

```

(2) INFORMATION FOR SEQ ID NO:337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCGGCC AAAGAGGCCT ACTTCTTTGA AGAACCATGA AGTCACACTA TATTGTGCTA 60

```

GCTCTAGCCT	CCCTGACGTT	CCTGCTGTGT	CTCCCCGTGT	CCCAGAGCTG	TAACAAAGCA	120
CTCTGTGCCA	GCGATGTGAG	CAAATGCCTC	ATTCAGGAGC	TCTGCCAGTG	CCGGCCTGGA	180
GAAGGGAAGT	GCCCCTGCTG	TAAGGAGTGC	ATGCTGTGCC	TCGGGGCCCT	GTGGGACGAG	240
TGCTGCGACT	GTGTCGGTAT	GTGCAACCCT	CGGAATTACA	GCGACACCCC	GCCCACATCC	300
AAGAGCACCG	TGGAGGAGCT	GCACGAGCCC	ATTCCGTCCG	CTGTGCGAG		348

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTT	CAGTTATAAC	CACTCCACCC	TCCTCACTTT	60
CTCTCTCTCT	CTCTCTTTTT	TTTTTTTTTT	TTTTTTGCTA	TGGGATTTAA	TGGGAAAAAT	120
ATGTAAAAAC	TGTCACTAGT	CAGCTGGCTC	TTTTTCCTAT	GAAATCTATC	AGTACCTTTC	180
TCCATCCGTT	GTTCCTCAATA	ATGACCACAG	AGCCTGAGTA	TACCAAGAAA	ACCAATATTC	240
GCATTACAGG	TCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC	AAAGAGGCCT	AGCCTTCTGC	AAGATGCTTC	TGATTCTGCT	GTCAGTGGCC	60
CTGCTGGCCT	TCAGCTCAGC	TCAGGACTTA	GATGAAGATG	TCAGCCAAGA	AGACGTTCCC	120
TTGGTAATAT	CAGATGGAGG	AGACTCTGAG	CAGTTCATAG	ATGAGGAGCG	TCAGGGACCA	180
CCT						183

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTTTAACT	GAGTGCAACA	AGTATTTTCG	TTAAGAGATT	60
TTTTTTCGTA	ATTACCAT	CTGCTGAATC	AATTTTAAAT	CCAGTTGGAA	GCTCTAAAAT	120
TCTAACATAA	TTCAGAAGCA	TTAAAAAGA	AGACTAAGGA	AGAGAAAGCT	ACATTTTAT	180
TTCAGCTTGT	ATTGCATTGT	GCAGAAAGGA	AAATAGTCTA	GCTAATTTAC	TTTTCCTATG	240
AAAAACCTTA	GAAGGCTCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACTT TTTCACCATT TTGGTGAACC CTTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAAATAA ATGTGAATTT TGTTTCCAGG TATTTATTCT      180
GGGGTACAAA AACTTCCCAG AATTTACAGT AGGAAAGGAA ACCCCTTTAT GATGTGGCTT      240
ATTATTACAA GCATTACAGG ATGATGCTGG CTAAGTCAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTGTTTTG AGCAATCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTATATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCTTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCCT GGA CTGAAAG AATGGGGTGA CTCGAG              466

```

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTAAACCC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGTCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

```

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GTACTGAGTG AATTGTGAAT GTGCAACTCA      180
TGTCAGAAAA ATAAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTATTAT AGATTGAACT TTTGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGTCTTGTA TTTATAAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCCTGGTT CAGTTTTTCT TCCTGAGAAA TTTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGACTGT GTTGTATGTG TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAAACT TCATCCACGG AAACCTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCCCTA TCTTTTATA ATCTCTGCCT TGTGGGATTG GGTTTGGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG      344

```

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCAGGCC ACAGGGAGGG CAGCTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCTATC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTTGGG      300
TAAACTCCTC GACTCCCAAG GCCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCCTCAC CACTCCTCCC TGGACCTGCA GCTCCGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTCCAGG GCCTCAGAAC TACCCCTACG GTTTCTCCTG      480

```

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:347:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG	CCTACCCAGT	GATTGTCAAC	ATGGCCAGCA	AGAGGAAATC	CACCACACCA	60
TGCATGATCC	CAGTGAAGAC	TGTGGTGTG	CAAGATGCCA	GCATGGAGGC	CCAGCCCGCT	120
GAGACCTTGC	CTGAAGGACC	CCAGCAGGAT	CTGCCCCCAG	AAGCATCTGC	TGCCAGCAGT	180
GAGGCAGCAC	AGAACCCAG	CAGTACTGAT	GGCTCTACAC	TGGCCAATGG	GCATCGGAGC	240
ACTTTAGATG	GCTATTTATA	TTCCTGTAAA	TACTGCGATT	TCAGATCCCA	TGACATGACC	300
CAATTTGTGG	GACATATGAA	CTCAGAGCAC	ACAGACTTTA	ATAAAGACCC	AACCTTTGTA	360
TGCAGTGGGT	GCAGTTTCT	GGCAAAAACC	CCTGAGGGGC	TTTCCTTGCA	CAATGCCACA	420
TGTCATCCG	GGGAAGCCAG	CTTTGTGTGG	AACGTGGCCA	AGCCAGACAA	TCATGTGGTT	480
GTGGAGCAGA	GCATCCCTGA	GAGCACCAGC	ACTCCTGACC	TAGCGGGTGA	GCCCAGTGCT	540
GAAGGGCTG	ATGGACAGGC	AGAGCTCGAG				570

(2) INFORMATION FOR SEQ ID NO:348:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC	TTCATGGCCT	AGAAAAAGT	TTTCAAGGG	AAGTAATCTT	AAATCTGTAT	60
ACTATTTTCT	ATGATGGAAA	TTCTGTGAAG	AAACAATAAC	AAATCTCTCC	TGACTCCTGT	120
CTGTCTTAAT	AGTAAGGTGG	TCTTTCTTCT	AATCTCCCCA	TCCATCCACC	CATCAGGAAG	180
CAACAGGGTA	CCTTGTGTGA	GTAAGTGTAG	ATTCTGACT	TCTTCTCGCA	CCTTCAGCTG	240
GAGCACCTGT	TGTAAGATGT	GCTGCCGGAG	GTTCTCTGG	GCAATCCCCA	TTGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:349:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC	TTCATGGCCT	AACAACCACC	ACCACCTGGA	CGCCAGCAG	CACAACCACC	60
ATAGCCGGCC	TCAGGGTCAC	AGAAAGCAA	GGCACTCAG	AATCATGGCA	CCTAAGTCTG	120
GACACTGCCA	TCAGGGTTGC	ATTGGCTGTC	GCTGTGCTCA	AACTGTTCAT	TTTGGGACTG	180

```

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC      240
TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC      300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCTGAG      360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT      420
CGAG                                                                    424

```

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

```

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTTGAGCTT GGGAACACTT GTACATGGTT      60
CCCCGGGACA TAAATGTAGA AGTTCTGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG      120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT      180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT      240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC      300
TGTAACAAC AATATATTTG ACCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTTAACTA      360
GAGTTATTTT AACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTTCCTCAAT      420
TATGCATATA AAAGCAATCC TCGAG                                                                    445

```

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

```

AATTCGGTTC ATGGCCTAAT TTTGGAAC TAAGACAGAT TTTTGTGTTT TGTGTTTTTA      60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCCT ACAGAGAAAT      120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAACTGAA AATAGAATA TCTGAAATAA      180
AAAATTCCT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA      240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG                                                                    278

```

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

```

GAATTCGCCT TCATGGCCTA CAGATTATCT TAACTGAAC TGATCAAGTA CTTTGAAAAT      60
GACTTCGAAA TTTATCTTGG TGTCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACTT      120

```

```

TTCTCTCCAA CCAGACCAGC AAAAGGTTCT ACTAGTTTCT TTTGATGGAT TCCGTTGGGA      180
TTACTTATAT AAAGTTCCAA CGCCCCATTT TCATTATATT ATGAAATATG GTGTTACAGT      240
GAAGCAAGTT ACTAATGTTT TTATTACAAA AACCTACCCT AACCATTATA CTTTGGTAAC      300
TGGCCTCTTT GCAGAGAATC ATGGGATTGT TGCAAATGAT ATGTTTGATC CTATTGGGAA      360
CAAATCTTTC TCCTTGGATC ACATGAATAT TTATGATTCC AAGTTTGGG AAGAAGCGAC      420
ACCAATATGG ATCACAACC AGATGGCAGG ACTCGAG                                457

```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```

GAATTCGGCC TTATGGCCTA GCAGGCGCCA AGGTAACATG AACAAACAGC TGCTTGCTGC      60
CCCCAAGCTT TAGTTTCTAG TGGGCCTGGA GCAATTGTGA AGGACAACCT CACCCAAGGC      120
CCAGTATTGA AGAGGGGTAG GGTGGGAGGA TTGTACATAT CGCGAACGCT TGGCAAATCT      180
CTAGATTTT TTTCTCCTA GGAATAATA ATTTTAAAA AGGCTTGTA AAAATAATA      240
AATGTTTCAT GACAGCAGCA GATGTAAAC TCCAGTACT CCGGGCGACC TCGAG              295

```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```

GCCTAGACAT GATGGTGGCC ACGTGCCAGG GGACCACACC CTATGTACAA AGCAGGAGAA      60
TGATGCTCCC AGCTGAGCTG CAGGATGGGC GCTGGGCTGA CTGGAGGGGT AGACGGGGTG      120
GGGTCTGACC CCATTAGCCT TTCCCCATCC AACCTGGGCC CCCATAAGCC ATTCTCTGGC      180
CCTCTGCACA AGACAGACTC AGCAAATCTG CGAGGTATGG GGATTCTGCC AACTCCCCAC      240
CTCGCCTCAC CTTCCCTAGG TCTGCGGTT AGGAGATTCT GGAGCCAGAG GGAGAGACCC      300
CAGAACTCC CCGGTCGGCG ACCCAGCCCG AGACGCCTGG GGTCCCAAGG GAAGCTGAAC      360
GCCCCGAGAA TGGGGAATG GAGAGAGAAC CTGAAAGAGC CCCTGTAAC TCGAG              414

```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```

GAATTCGGCC ATCATGGCCT ACTCCCGAGT AGCTGGGACT ACAGGCATGT GCCACCACGC      60
CCAGCTAATT TTTTGTATTT TTTTGTAGTAG AGATGGGGTT CCACCATGTT AGCTAGGATG      120

```

ATTTCCGATTT	CCTGACCTTG	TGATCCGCCC	GCCTCGGCCT	CCCAAAATGC	TGGGATTATA	180
GGTGTGAGCC	ACCACGTGGC	CTCATTTTCAT	TCTTTCATGT	GGATAGGCAG	TTGTTCCAGA	240
AGTATATAGT	GAGGAGCTTC	TTCTTTCTCT	AATGATCTGC	AATGTCACCT	TCATCATTTA	300
TGAAGGTTC	ACATATACAT	GGGAATTTT	TAGTCTGGCA	TTAAATGTT	TTCAAAAGAG	360
TTCTGCAAA	CGTTTTTGT	TTTATTTCT	ACTGTTCCCT	TCACGTACTC	TCTACTGAAC	420
TAAACTCTCT	AATGTGTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTC	AAGAGCAGCC	CACCTGTTCA	GTATTCATAC	60
CCACATATCC	ATAATAGAGC	TCTTCTCTTC	CCCCGGGTTT	CTCTGCCTCA	GCCTTTTCCT	120
CTTAGCAGAT	GCCATCTGCA	GGGCCACTTG	GCTGCCCGTA	GCAGTAACCG	CACAGTCTTC	180
CACATTTACT	CCCTCAGCCT	CAGCTGCTCC	TGCAGCCCAG	GCACTGTCTC	TGTCTCTGCA	240
TTGCTCAAGC	CTCCACCATC	TCGGTTACAC	CCCACAGCCA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

GAATTCGGCC	TTCATGGCCT	ACTGCCTTAG	CCTCCCAAAG	TGCTGGGATT	ACAGGCGTGA	60
GCCACCATGC	CCAGCCCTAT	AGTAGTTCTT	CTTTTGCCCC	TTAATATCCT	CACCCACATG	120
TCCTGTACCC	TGCCTGAACC	CTCCTCCTCT	TTTTGTCTG	ATCTTTGAGC	TCCCTAGAGC	180
CCATAATTCT	TTAGAGCAGG	TATGTCCCGA	GTCTGAAACA	TGCCCTTATT	TGTCCCAAGC	240
TCTGGACATT	TCTCACCCCA	TCTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

GAATTCGGCC	TTCATGGCCT	ACCAAGGAAG	CCTTTCTGTT	TTTGGCCCAA	GGAGCGTCAA	60
TAAGATCTTT	GAAAATACTT	TGAAGTCATT	TGTGTGTGT	GTATGTGCAT	ACACACCTGA	120
TTTGTTTTAT	TTTTTATTTT	TATTTTTTGA	GTTAGGGTCT	GGCTCTGTCG	TCCAGGCTAG	180
AGTGCAGTGG	TGTGTTCTCA	GCTCACTGCA	ACCTCTGCCT	CCCAGGCTCA	AGCCGCCCCC	240

CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

```

GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG      60
GAAAAGAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT      120
GTGAAAAAAG CTAGCAGACA GTTGAAGTGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG      180
ACTCATCGTT GTAGTCATTC GTAAAGAGTA AATACTTGGA GCTATTGTAG TAGATGGTAT      240
CACCACGGAA CACTCGAG                                     258

```

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

```

GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG      60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG      120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC      180
TTCACGTTGT AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG      240
CGCTGCCCCC CCCCTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

```

GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT      60
TAAAAAATAA TAATAAAAT AACATTCACT TTGGTATTGT TCACTAAGGT ATTGGTTGTT      120
AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAAGCA TGTTAAAGTC TCAGTAACTT      180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGGG AGAGTCCTTT      240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAAACGA CATCAAAGAA AAACACACT      300
ACAGTGACTG CAGACTTAAT GTTGGCCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT      360
TTGATTACT AATCTTTTAT TTAGGAAATT TACATTTTTA CATTAGTGAG ATTGGCCTCG      420
AG                                                                 422

```

(2) INFORMATION FOR SEQ ID NO:362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAATA      60
TCTTTTCTCG TGCAAAGCCT TCATATAATT GTTGTATTATTA TAACAGTGAT GATGACTGCC      120
ACTCATTACA ACTGCTGTG TTAATCTTTG TTGTATTATT AAACCATATG TTATTTAAAC      180
CATAAACTGC ATCATAAAAG CAGTTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT      240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:363:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTTC ACAAATCCTG AAGTCTTCT GTGAAGTGAC CAGTTCTGAA CTTGAAGAT      60
AAATAATTGC TGTAATTC TTTTGATTTT CTTTTCAG GTTCATGGTC CTTGGTAATT      120
TCATTCATGG AAAAAATCT TATTATAATA ACAACAAAGA TTGTATATT TTTGACTTTA      180
TATTTCTGA GCTCTCTGA CTTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT      240
GAGGGCCCAA AACAGAGACT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:364:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCTCAT CAATAGATGG AGACATACAG AAATAGTCAA      60
ACCACATCTA CAAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT      120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG      180
ACGTGAAGTC CGTGAAGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA      240
ATGGTGAAGG GAGACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAGTTGTGT	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATT	TTTTCTTTA	AACTAAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTGT	TTTGTGTAGA	AATTGGCATT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTAAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTTCTTTTG	60
TTATACGACG	ATTATTGTC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTTCTCTCC	CAGACAAATC	240
TTCGTCTCTC	TGTTCTTGA	AACTCAAAGA	ACTAAGCACC	TCCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

AATTCGGCCT	TCATGGCCTA	CAAGCTCGAT	CATTATCCTT	CTGTGAGTTA	CCATCTGCCA	60
AGTTCATCCG	ACACCCCTCTT	CAATTCTCCC	AAGTCGCTCT	TTCTGGGAAA	AGTTATAGAA	120
ACAGGGAAAA	TTGACCAAGA	GATTCACAAA	TACAACACCC	CAGGATTAC	TGGTTGCCTC	180
TCCAGAGTCC	AGTTCAACCA	GATCGCCCT	CTCAAGGCCG	CCTTGAGGCA	GACAAACGCC	240
TCCGCTCACG	TCCACATCCA	GGGCGAGCTG	GTGGAGTCCA	ACTGCGGGGC	CTCGCCGCTG	300
ACCCTCTCCC	CCATGTCGTC	CGCCACCGAC	CCCTGGCACC	TGGATCACCT	GGATTACGCC	360
AGTGCGGATT	TTCCATATAA	TCCAGGACAA	GGCCAAGCTA	TAAGAAATGG	AGTCAACAGA	420
AATCGGCTA	TCATTGGAGG	CGTCATTGCT	GTGGTGATTT	TCACCATCCT	GTGCACCCTG	480
GTCTTCCTGA	TCCGGTACAT	GTTCGCCAC	AAGGGCACCT	ACCATACCAA	CGTTCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

TCGACCCCTG	GCTAATGACA	AACTATGTGA	CCTTCATGGT	GGGGGAGATT	CTGCTCCTCA	60
TCCTGACCAT	CTGCTCCCTG	GCTGCCATCT	TTCCCCGGGC	CTTTCCTAAG	AAGCTTGTTG	120
CCTTCTCAAC	TTGGATTGAC	CGGACCCGCT	GGGCCAGGAA	CACCTGGGCC	ATGCTCGCCA	180
TCTTCATCCT	GGTGATGGCA	AATGTCGTGG	ACATGCTCAG	CTGTCTCCAG	TACTACACGG	240
GACCCAGCAA	TGCAACGGCA	GGGATGGAAA	CGGAGGGCAG	CTGCCTGGAG	AACCCCAAGT	300
ATTACAACCTA	TGTGGCCGTG	CTGTCCCTCA	TCGCCACCAT	CATGCTGGTG	CAGGTGAGCC	360
ACATGGTGAA	GCTCAGCTC	ATGCTGCTCG	TCGCAGGCGC	CGTGGCCACC	ATCAACCTCT	420
ATGCCTGGCG	TCCCGTCTTT	GATGAATACG	ACCACAAGCG	TTTTCGGGAG	CACGACTTAC	480
CTATGGTGGC	CTTAGAGCAG	ATGCAAGGAT	TCAACCCAGG	GCTCGAG		527

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GGCAAGAAAG	GATGTCCGCA	CAGCTGGCTG	CTGCTGAGAG	CAGACAAAAG	AAGCTGGAAA	60
TGGAGAAGCT	TCAGCTACAA	GCCCTTGAGC	AAGAGCACAA	GAAGCTGGCT	GCCCCCCTTG	120
AGGAAGAGCG	TGGCAAGAAC	AAGCAGGTGG	TCCTGATGCT	GGTCAAAGAG	TGCAAGCAGC	180
TCTCAGGCAA	AGTCATAGAG	GAGGCCGAGA	AGCTCGAAGA	CGTAATGGCC	AAACTGGAAG	240
AGGAAAAGAA	AAAGACGAAT	GAATTAGAAG	AGGAACTCTC	CGCTGAGAAA	CGAAGAAGCA	300
CAGAAATGGA	AGCTCAGATG	GAAAAACAAC	TCTCTGAGTT	TGACACTGAG	CGGGAACAGC	360
TTCGTGCCAA	GCTGAACCGG	GAAGAAGCAC	ACACCACAAA	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCCTGGAC TTATGTGCTT CGTCTGGAAT      60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCCAT GTTGACTGTT TTATTGGGGT      120
TTCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC      180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT      240
ATCCCCTTCT GACAATAAAT CATCTTTAAT CATTCTCAG CAACCTCAAG CCCAGCAGCG      300
AAGAGTCACC CCCTATCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCCCAAACC      60
AACAAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTTT GGCTTTACTC TTAGCCCTGC      120
CCCATTTCCT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTTCCTT CCCTGATATG      180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTCC ACAGCACTCT CCGCATTGCC      240
TTCTCCCACT GTGGCTCACT GCTGAGCTGT GTTCAGGCCC TTTGGGAAAC CCTCTCTTTC      300
ACTCCTTTTC CCTGGTCTGG CTTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTTGAAA      360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG      420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCTAGA CCTGCCTCGA GTAACCAGAG AGTCTTGTC AATTAAACAC TAGCAGTATT      60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTTAC      120
TCTTTTGGCG TATTTGATGT GTCTTTATGG AAATCATAAA ACTTCAGCCT TCCTTGGATT      180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT      240
CATTGCACAA AAGTTAACGG AGGCTTGGGA AACTGAGCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT	240
TCTATCAGAA	GTACTCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTCC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCCG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTTGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAAACATATG TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTGA ACATGTATAT      60
ATACCATTGA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCA TAATCTCTGA GGAAAACAAA ACCTGTTTTT TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTAAATTTT GATGTCAGGT CAACATTTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG                                     277

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG      290

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTCTTTTCTA GTGGGTCTCA      60
TGTAGAGATA GAGATATTTT TTTGTTTtag AGATTCCAAA GTATATATTT TTAGTGTAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCTNTGTG      180

```


ATAATCCCAT AGCAATTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60
 GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120
 TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTCCTATAC 180
 CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTTCTG TCAGAGAGAA AGTTCTGCCC 240
 TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGTCTACCTG GGTCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60
 TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120
 AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180
 AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240
 AGGCAGGTCT AGAATTCAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300
 AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360
 TCTAGTGCCA GCACTTCAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420
 GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480
 CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540
 CTCGAG 546

(2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60
 CAAAGTGGTT GTATTGTTTT ACATTCCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120
 CATCCTAGCC ACAAAAAGGT TCTGTTTTT AAAGACAAT TTTTTTTCT TTGAGAGTTT 180

CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC	240
TGTTCTCAGT TGGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC	300
AAATGAGATT TCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TCGATAAGAG ACTTGAAATT	60
ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC	120
TGGGGGAAAA AGCAGAGGCA CAGTTTGAAG AAAATGTGTA AGAGACTGAC TAGGTAAGAT	180
ATGGTCACAG TTCATAAGTC CTTTGAATTC TAGGATTAAA AAGGTGAACT CGAG	234

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTCCAC	60
GTCAGTCCCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG	120
CCTTGTCCTT GCATCAGACC CCGGCCCAGC ACAGTAACGA GAATGGGCTT CCTAAACACA	180
AATCTGATTT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG	240
CCCTCACACA TGCTGTTCCC TGCACCTCCG ACACCCTTCC CAGCGCCCCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTTGCA	60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAT AAGGAAGCAA GGTAAATAAA	120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA	180
TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG	215

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTCATATT TTTATACTAT CAGATTAATG      300
TTTTATATTT TATCTATCAT TTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTGTGAG GGACAGGGAC TTTCTTCTT TCCTCATCT TCATCTTCCC CCTCGAG      477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAATAT TCAATAATGA GTGGTGCAGC      60
CTTGGGACTT GAGATTGTTT TTGCTTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTTCTTATT GTCTTCATAC TGCCTCTGGA TGTAGTACG ACAATATACA ACCGGTGCAA      240
GCTCGAG      247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCCTTGGGT GCTCACAGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAGGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTACTT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGTCATGGC      360
CTCGAG      366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT	60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAATT TTCCGTTTGA CAATATTTGG	120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA	180
AAAAGTAGAA GCTCAAAAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 387 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT	60
AGCTCTCTGG AATTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC	120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG	180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA	240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA	300
TCCCAGTTCA CAAAGCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT	360
CCAAGTAAA CATCAGAACT TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTAT TAAATGTAGT TTGTGCCTTT	60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA	120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC	180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT	240
GAAAAATTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA	300
CATTGCACAT CTGAATTGTA ATTCGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT	360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC	420
CGGATCCCAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC	480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG	540
CAGAGGCTGC GGG	553

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```

GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAAGTT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTCTTA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAATA ACTTTTCT      420
TTATTTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG          472

```

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```

GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TCACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT      360
GAAACATACA TGACACAAC TGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AAACATAAGG AAATGTATT CAAACAAAAG TGGCAAGGGA ATTTCACAGA      480
ACTAATTTTT TAAGGGAGGT AATAAAGCA GCAGTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```

GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTC TGAAGACAGC      60
AGATTTATCA CTGTTAATCC AGCGGAAAA AACACCTCTG GAATGATAAG CCGCCTGTCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAAC TGGAGACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300

```

```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCGCTCGG GGAAGCTGAG CATCGGGGAC 360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC 420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG 462

```

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TCGGAGGAAT AGAAATGCTT 60
GCATACTCTT GATTTTTTTT TTTTITTTTG GTGTAAAAAA CACACCTCC CCTCCACCC 120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC 180
CTTCCCAAT CTGCTCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA 240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTT CAAAACTAGG 300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTACA CGACAGGAGC 360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GCGGTGGCC 420
CTACAAAA 428

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACCTGGT GTCTGATTGG 60
TTGTCACTACT TTTCATTTTC CTCCTTTCA GATCCAATCC ATTCTACACA TTACTGTAT 120
TTTTTCCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTTAGGCTTC TTAATGCTTA 180
CTGTATCAGG TGTAACACCC TTTTGCTTAC CTTTCCAGGC CTTTTTAGAG TCTTATATAG 240
CTTACTCCCA TGCTCCAACT CCCCTCGAG 269

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATTT 60
TCCATTTTTA TTTCATTTT TAATTGCCCA GAGCCTAAT TCTGTGGGCC TCTGCTGATT 120
TGCACATTTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACAGGCC TGGGCCTCCT 180
TATCACAAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG 236

```

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```
GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCAA TAGTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATGGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG              292
```

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```
GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAACCA ATACACTTTC TTTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAACA      300
TGAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG              345
```

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG              252
```

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```
GAATTCGGCC TTCATGGCCT AAGAATACGA AATTTGAGAG GATGAATTTG ACCTTTAATA    60
TTGTTGGACT TTGTATTGGA TATCTTTCCT CCATCACTTC AAAATCGTCT TGCTTGGCCT    120
CTTATTGCAA CCACAGCTGC AGTAGACAGT TCCATACAAG CTTCCAAGAA CTTTCATGGGT    180
ACATCTGGAG AGCACCTCAC CTGGGGCCAC ATTCTCTACC TTTCTGTCT TACTCTTCCT    240
CCTCTGGGCT TCTTCTGGT GCATGGGGGT GGGGGGAGAT ATTAAGTATT CCCCACAGC    300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```
GAATTCGGCC TTCATGGCCT ACACAGCAAC AACCAACATA GCTAATACAG AAAGCAGTCA    60
GCAGACTCTA CAGAATTCCT AGTTTCTTTT AACCAAGTTG AATGATCCTA AAATGTCTGA    120
AACGGAGCGC CAGTCCATGG AAAGCGAGCG TGCAGACCGC AGCCTGTTTG TCCAAGAGCT    180
CCTTCTGTCC ACTTTAGTGC GTGAAGAGAG CTCATCCTCA GATGAGGATG ATCGGGGGGA    240
GGTTCTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```
GAATTCGGCC TTCATGGCCT AAAAGAACT AGGTGTGATT GGAAGGAAGA ATCATGAAAG    60
ATCAGGGTAG ATACTGGTGG GGCAGCTATT AAAGGAGTTT GAGCAGGGGC ATGACATCTT    120
CACATTGAAA GCAATATGGG AGTCGAATTA AATTTAGTAC CCAGTTGAGA TAAAAGTCCA    180
TTGCCATATT CAAGTGAGG TGGGACAAAA GCAGAGTCAG AGAGATTAAG AGGCTGGGAA    240
AGATTGAAGT GATTTTTAGG AATCAGAATC CACATCAGTT GATGACAAGT ACAGAAGGGC    300
ACAATAGCAA GAAGAAGAAG TAAATGATAA TTCCTAGATG CCATTAGTCA CAATCAAGTA    360
CGGAAGAGAC ATTATTGACT GAGGTTGAAT CAGGCGAGAG AAGATAATAT ACCTGATTTT    420
GGAAGTGTTG CATGTAAGGG GGCTTCGATT TCAGCTACTT ACATACTTGG GAAGTCTCGA    480
G                                     481
```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```
GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC      60
TTTTCCATAT CTCTGGAAC TATAGTCAAA CGTAACTCT GAGCCTGAAG GAACCAGTTT      120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTTGGG TTTCACAATT      180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTTCTT TTTTGAGTGG CATCTATTAT      240
CTCATCATTC TTCAGGGCCA TGAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT      300
CACTCGAG                                         308
```

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAAA GAGCAATCTG CCCCACTGTG      60
AGCCTGAGCT TCCATACTG ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG      120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC      180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCAATTCTT      240
CCTACAGCTG CAGAGTTTTC AACATATGGA CAGGTGTGCC AGGATTATT TGACTAGTCT      300
CTTACTGATC TAGCTCACCT CCTAAATACA ACTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT      60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA      120
CAGGTGAACA AGCTTTTCT GTATTTACAT ACAAAGTCAG ATCAGTTATG GGACAATAGT      180
ATTGAATAGA TTTCAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAACG GTGTTGGCGT      240
GGGGGTGGAG GGGTGAGGTG GCGCTAAGC CTTTTTTTAA GATTTTTCAG GTACCCCTCA      300
CTAAAGGCAC TCGAG                                         315
```

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCGGCC	TTCATGGCCT	ACCTGAACCC	CTTACTTCGA	AGGATCATAA	GATTCACAGG	60
GGTGTTTGCA	TTTGGACTTT	TTGCTACTGA	CATTTTGTGA	AACGCCGGAC	AAGTGGTCAC	120
TGGGCACTTA	ACGCCATACT	TCCTGACTGT	GTGCAAGCCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGCAC	CACCACTTTA	TAAACAATGG	GAACATTGTG	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTCGCA	CTATAGGGTT	AGATTTTCTA	60
CTGTAGGGTT	AGATTTTCTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGGA	AACTGGGTAA	CCCAAAAACA	TAAGGTCGAG	GTCCCTGTTC	180
TTCACCGGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTG	ACTGGTAGTT	TAGTTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTTGTTTG	TTTAAACAGA	TTCAAGAGCA	GGAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCTAGA	CCTGCCTCGA	GTGAGGCTTT	TAAAAACAAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTCTCCTTGG	CAATATATTA	GTGATACTAT	TGTTATCTTC	120
ACACTAAAGA	TTCAAACTT	TAGTTTTTGT	TTAGGAAAG	TTTTTTATT	TTACATTCT	180
TTATCCTTC	ATAATTACCC	AGTCATCATG	AACTTTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTGATAC TAGGGACCGA AGGGAACATA GAGACTCCAG AGACATGCGG GACTCAAGGG      60
AGATGAGAGA TTATAGCAGA GATACCAAAG AGAGCCGTGA TCCAGAGAT TCTCGGTCCA      120
CTCGTGATGC CCATGACTAC AGGGACCGTG AAGGTCGAGA TACTCATCGA AAGGAGGATA      180
CATATCCAGA AGAATCCCGG AGTTATGGCC GAAACCATTT GAGAGAAGAA AGTTCTCGTA      240
CGGAAATAAG GAATGAGTCC AGAAATGAGT CTCGAAGTGA AATTAGAAAT GACCGAATGG      300
GCCGAAGTAG GGGGAGGGTT CCTGAGTTAC CTGAAAAGGG TAGGCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GAATTCGGCC TTCATGGCGT TAAACTGTG CTAACAGAG GTGTCCTCTG ACTTTTCTTC      60
TGCAAGCTCC ATGTTTTTAC ATCTTCCCTT TGAAGTGTG CTGCTGCTGC TGCTGCTACT      120
ACTTACAAGG TCCTCAGAAG TGAATACAG AGCGGAGGTC GGTGAGAATG CCTATCTGCC      180
CTGCTTCTAC ACCCCAGCCG CCCCAGGGAA CCTCGTGCCC GTCTGCTGGG GCAAAGGAGC      240
CTGTCTGTG TTTGAATGTG GCAACGTGGT GCTCAGGACT GATGAAAGGG ATGTGAATTA      300
TTGGACATCC AGATACTGGC TAAATGGGGA TTCCCGCAA GGAGATGTGT CCCTGACCAT      360
AGAGAATGTG ACTCTAGCAG ACAGTGGGAT CTAAGTGTG CCGATCCAAA TCCAGGCAT      420
AATGAATGAT GAAAAATTTA ACCTGAAGTT GGTGATCAAA CCAGCCAAGG TCACCCCTGC      480
ACCGACTCTG CAGAGAGACT TCACTGCAGC CTTTCCAAGG ATGCTCGAG      529

```

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```

GAATTCGGCC TTCATGGCCT ACTGAGCCTA GTAATTCAAG GCTGCAGTGA GCTGCGATCA      60
CATCACTGCA TTCCCGCCTG GGCAACAGAA GTAGACTCCA TCTCTAAAAA GAAGGAAAGA      120
AAAAAAGGAA GAAATATACA GTAATTTTAA ACTGGGAGAT GAAATGCTAA TTTCTAGAAG      180
TCCATTGGT TTTGAAGGGT CTCATGTCAA AAAAAAAAAA AAGTAAGTAA AATAAGACCC      240
ATCCTACTGT TTTATATACT AAAATAGTAA GTTAATTAAA TGAAATGAA GTACATTTGG      300
GCTTTTCAAT ACCAATCCTG GAATGTTGAA AAGTTGCCCA AAAGACATTT AGCAAGACTC      360
GAG      363

```

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGCAGCTGCT TCACAACAGG ATCAGAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCAGCC CCGTGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAAACTGAAG GAGTCTGGAA AGCAGCACGG	60
CTTTGCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCTT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTTCT	180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:422:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 216 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAATG GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAGGTGGA ATTCTGGGCT GGCTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCCGG GGAATTTTGA AACCAAGATG GGGTCTGTG AATGACCTC	300
TAGCATTTAT TGAGTGCTTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:424:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA  GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA  GAGAATGAGC TCCTTCGAAT GTTCTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG  GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC  AACAGCCCCA AGAACTGTGA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC  GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG  GAGTGGGGGC CAGCCTGAGG ACCCCCGCCT ACCACCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:425:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 691 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA  GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT  GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC  CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT  GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCAACACC GACCTCACCA      240
CCATCGACCT  GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCTCA      300
TGGGCTGCT  CTTCGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGCCTGGCCA      360
TCTTTGTGTT  CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT  GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC  TATGCTCATG TACTGGCTCA CTTCCACCT GGTGCGGTGA GCGGCCCCGC      540
TGAACCTCCC  GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCGGAA CTNATCTCCT      600
GCCTGCAGGC  CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC  GCCCCCAACC CAAGGCTCGA G      691

```

(2) INFORMATION FOR SEQ ID NO:426:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA  TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG  GACCAAAACA AGCTCTTTT TATAAAGGAA TGGCATCAT TCTTTTACCA      120

```

GGACAAAAAT CTCCATGGTT TTTCACAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA	180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCTGAAT CCAGGCGAGA AGTTCCTGTG	300
TATACAGATT CTGAACTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT	60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTACTACT GGGTGGCAGG	180
TGGGCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 670 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG	60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCC TTGTGACCTC CCAGGAAACA GAACTGATCT	120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCA AGGACAGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT	300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCTG AGGCATGGGA	360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCAA AGGCCCAAAG	420
AGGGCCGTGG GGCCTGAGGA GGTGATAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCAGTGCT GGGTGTTCCT ACCACCATCC CCCCATCCCC CATCTAAGTC	660
GCTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

```

GTAAGGATTG GCGATTCTTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT    60
ATGGCTGGCC TGGTTTGTTC CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG    120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCCAT GGGCAGATGC    180
TGGGGGAGGA GGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCCTGCAA    240
CATCTCTCTT TTCCTTGCT TCCCTCCCA ACCTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTAAATGCT    60
GTTTTCTCTG TTCAAAATGC CCTTCTCTAC CTTATCTACT TGTGCCACTG CATATTCCTA    120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGCTCTG ATCATCCTGG CCCCTCTGGC    180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA    240
GCCCCTGAA TTGGCATTAT GGGCAGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

```

GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA    60
AACCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCCTT GTCAAGCACA CCCCTCGTGT    120
CCAGGTTCTT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG    180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCTATG    240
CGACTCTCAT ACAGGCGGGC GCCAGTGAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA    300
TCCTGGTTTT GATTGGTCAG ATTCCTTTTT CACTAGCGGC GGCTCTCGAG    350

```

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG    60
GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGCAGAGACT    120
CAAGGCCCGC ATCAGCCAGT CAACCAAAAC CTTACCCCTT TGTGAACGGC TGGAGAAGAG    180
GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG    240

```


GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60
 TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCAGTGTCC ATGTCACCAT CCTCCTCCTC 120
 CTTTGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCCACAAGC TGAAGTGTGG 180
 CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT 240
 GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GGCGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60
 AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120
 CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180
 ATTCTAACAA AACAGCTTTT TGAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240
 CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300
 AATGCAAACT ACCCACACCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT 60
 ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120
 CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTC TACACATCCT TCCCGATGGA 180
 AGAAGGGGTT GGCCAAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240
 TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGACCAAAAA AACTATTCTG 300
 TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAGTTC ATGTGTGTCATG TGCAAAGGTG 360
 CTGCTGAAGA ATTTAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

```

AGGTATTTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG      480
TAACGTCAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA      540
GTCTCGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

```

GAATTCGGCC TTCATGCGCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT      60
TTATTCTGAG CTGTCTTCAC TTTGACTATT TGGGGGGGCTT CTCTCAAGTA CAGATGTGGG      120
TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT      180
GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAACTAA      240
CTGCCACCAT CCTGGAGACA TTTTGAGGG CTTTCCTTTC AAGTCTTTC AGTACAGGAC      300
ATCTCGAG                                         308

```

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

```

GAACAGAAGA GATCCCCTCG GCCCCACGC CATATGACCA AAGTCACACC AGGTTGAGAG      60
CTGCCCACCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT      120
GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTGAGTCCC      180
TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT      240
CTAGAGCAAC CTGGCTCTCC AGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA      300
GGTGTTCCTCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA      360
TCTGTGGAGT CCATCCCTGA AGTGTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC      60
AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG      120
CTGCGTGTGG TGGAAGAGCC GTACACGGTG CGTGAGGCCC GCATCCACGT GCGCCATGTC      180
CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGTTGA CTGCAACTCC      240

```

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCA CCCAGCCTTC TTCTTTTCAT	60
TATAACCTTT ATACCACAGT AAGCTGTTGC ATCATTCAAA TGACTCTGCA TCCTATATTG	120
AATATTCTCC ATTATTCTCT AATATCTTTG GGGGTACCCA GGATTACAGG GTTCTGGGCA	180
TACATGTTAA TGCTTTTGCC AGGACTTTTC TTTTATTCA TTGTCGTGAC CCATTGTCTT	240
TGCTTATATT TAAAGTTTTT GCTCTTGATA TCATTGGTTC TTTCCTAAGT CACTTTTTCT	300
GGTAACTGCT TTGGAATGAA TCATACATAT CTCATTACG GAGCTCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCGGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTTCGTT GTCAAAACAT	60
TTTCACAGT CAGGAATCAC AGTCCTATTT CATCTTTTGA AATAAAAGT AAAGTCCATT	120
TTTCTTAAGC CTTATTATAC CATTATCCAA AAACACTACC TAGCATTAT CTTAGTTTTT	180
CATATCTCCT TAGCAGATAG TTTAGTATAT TCCATTTGTC TTATTTGAGG TTAAAAA	240
GTGTGGAAG AAGTTTCTCA GGAGTTCAGC AAGCCTTCC ATCTATCTTC TATTTTAAAA	300
GAATGTGATT TATTGTTTT ATGAATAAAA TATACCTCGT GTGTTTCTCA TATGATGTT	360
CATTACATTA ATCATCCATT AAGTAAATGT TTTGTGCTG CAAAACTCG AG	412

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC TTCATGCCTA GCCAGGAGGA GGAGGACCCT ATGAACAAAC TCAAGGGCCA	60
GAAGATCGTG TCGTGCCGCA TCTGCAAGGG CGACCACTGG ACCACCCGCT GCCCCTACAA	120
GGATACGCTG GGGCCCATGC AGAAGGAGCT GGCCGAGCAG CTGGGCCTGT CTACTGGCGA	180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACA AGACAGGGAA	240
GTATGTGCCG CCGAGCCTGC GCGACGGGGC CAGCCGCCGC GGGGAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```

GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCCTGGT    60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG    120
GGTTTGTCCT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA    180
CCTCTGGCGT GTTCTAGAGA GGCCTCCCG TCTAGGCTCG AG                        222

```

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```

CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT    60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTGGA TTTTGTGAT    120
TTTGACCACT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA    180
GTGCTTTGAG CCCCCACTAC TCGAG                                205

```

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTGCTCTGC TAACTCAACT    60
CTGCCTTCCT CTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG    120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG    178

```

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

GAATTCGGCC	TTCATGGCCT	AGAAAGCCAC	AAACTTTTTA	GTTTTTAACT	TCAAAGGCTT	60
CTTCTCTTT	AAAAAAATT	ATTTTAAATA	TAGAGTCAAA	AAATGGATG	TATTATTTTG	120
AGCTTCTAAT	TGCTGCCACT	TGGAGATGTC	CAAGTAAGAA	GGCCTTCTTT	TTACATGGGA	180
TGAATTGTGC	ACTTCTACTG	ATGATGACTA	CAGCAGAAGT	GATGTTATAC	GTACAGGCAC	240
TTGAACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

GAATTCGGCC	TTCATGGCCT	AGGGCTTATA	TTTAACTGA	ACTATTATTA	AATAAAAACA	60
AAATAAAATC	TTATCATATA	GGTGTAACTCT	GTTCTAAGGA	AAAAATCCTT	CTATCAAGAC	120
TAAACGTCTA	ACTGAATACA	GAATGACATT	TCATGCCTTA	AGGTCTCTGT	CCATGTTGTT	180
CCTTCTTTCT	ACTGTCCTTT	ACTGTATTAG	TTCAAACAT	TCTAATTCAC	TCTCCAAAAC	240
CCAATTCAAA	CATCACCATC	AGAAAGTCTT	CCATGATGGG	CCAGGTGTGG	CGGCCCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

GAATTCGGCC	TTCATGGCCT	AGCTGAAATG	CTTCTATTG	GATACTATCT	GGGCATATTA	60
CTTCCTGTGG	TTCACTGTCT	GGGTGACAGG	ATTCATAGAA	GCCCAAACCT	TAGCACCACG	120
CAGCATACCC	TTGTAACAAA	GCCACTCGAG				150

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

GAATTCGGCC	TTCATGGCCT	AATTTGATTT	TATTAGGTTT	AAATTGTATT	TCTTCAAATT	60
TCATAAACTA	TAGCATTTAT	CTCCATATTT	TTAATAAATG	ATCACAAATA	AATCACTGTT	120
AATATCTCCA	TTTACATTT	TACAACTCCT	GCTATTGCTG	GATTTTTCAT	CCTATGATAT	180

GTAAACCAA TTAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 453 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC TTCATGGCCT AAGACTGGGG GCATGTACCC CACCTACTTT CTGCACCTGG	60
ACCGTGAGGA TGGGAAGAAG GTAAGGTTGG TCTGGGCATG TTATCATCTA GGCTTTACAG	120
CCCTTTGAAA TCCTAGGGGC TGAAATGTGA CTGGAAGTCT CATATCTACC GCTGACCTCT	180
CAGTTCCTCA AAGAACTGC CTTCGTGTCT GGTCTGTGCA CATCTTTGTG TTTTCCAGTG	240
CATTGTGTG TGTGCACATA TGTGCGTTTG GGAGCTGACG CAACGGAGAG AGTCTGTGTG	300
AGTGGCTCTC ATGACTGTGT GCAGACCAGA GGCTGAGTCT GGAATATGAC CTCATTCCAC	360
TCCCAAGGT GTTCTCTCTG GCGGAAGGA AGAGAAAGAA GAGTAAACT TCCAATTACC	420
TCATCTCTGT GGACCCACA GACTTGTCTC GAG	453

(2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC TTCATGGCCT AAAAGCAAAT TAACTTGTTT TGAAGAGAAA GTATAGATTA	60
ATTTTGT TTTT CTGTTTAAAT TTTATCTCCT TGGTAAAGAT TTTT TTTTCC TGGGCAGAAA	120
ACTTGGCATT TTTAGGCGTA GATACCTTAC CTTACAATGC CAAATGAAT TTAATTCCAG	180
TACTCAGGTT TTTCCCTTTA ACAGACTCTA TGTGTACCAG GCATTGAATT CTAGACCTGC	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 414 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC TTCATGGCCT AGTTTGGTGG GGTGAAGTT GATGGCAAAC TCATGGGAGA	60
CCTTCCAGTC TGGGGGTAAC TGGGCCCCGA ATCCCAGAGC TGGAAACATC TTATCACTGT	120
CGTAGTCCTG AATGATCTGC CCAACAGCCC AGATGGCCGA CAGATATTCTG TTGGTGCCCA	180
TAGGGTTGAT ATAGTGCAAA GAGGAAGGGT CGAGGGGATT CCCGTGGAG GCTGTAAAGT	240
CTATTCCAAC GGTGAACATG AGCTGGCAGC CTCCCAGGAT GTAGTCAAGG AAGGAGTAGT	300
CTCGGTTTAT CTTGCAGGAT CGCAGGATGA TGATGCCCGA GTTTTATAG TTCTTCTTCT	360

TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 374 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC TTCATGGCCT ACACACTGAC TGACAGACCA CGGTATGCCT TGCACCACCC	60
TGGCTGCTGG GGTCCAAAGA GGGATCTGGT AGACCTGGGC TGGAACTCA GCTTCACCAT	120
TTACCATCTG GGTGGCCAAT GGAGTGTTAC TTGGCCTCTC TGAGCCTCGG TTTTGCTCGT	180
CTCTGAAACA GTAAGATACC TCCCTTTGGC TGTGTGATG AGGATGAAGG TTAGCCTATG	240
CCCAGTAGTA TGCCTGTCCC TTCATCGATG CCTGCTCATC TCACTCTTGC TCTGGAAACA	300
CCCCTAGTAG AGGCGCAGAG GGGCAGGGCC CACCCACCC ACCAAAACGT GGTGCAGAAT	360
GAGGTGATCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:453:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GGCTCCGTCC GCCGCCACCA CCCACTCCGG ACACAGAACA TCCAGTCATG GATAAAAATG	60
AGCTGGTTCA GAAGGCCAAA CTGGCCGAGC AGGCTGAGCG ATATGATGAC ATGGCAGCCT	120
GCATGAAGTC TGTAAGTGA CAAGGAGCTG AATTATCCAA TGAGGAGAGG AATCTTCTCT	180
CAGTTGCTTA TAAAAATGTT GTAGGAGCCC GTAGGTCATC TTGGAGGGTC GTCTCAAGTA	240
TTGAACAAAA GACGAAGGT GCTGAGAAAA AACAGCAGAT GGCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:454:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC TTCATGGCCT AAGAAGTGTC TCCTGTATCC ACCTCTTCTT GGCCTCCCTT	60
CCCCCACTTC CTGGTCCCTG TCCACTCCTC AGGTTGGTGC TCTCACTTCT TGAAAGCTCT	120
AGGCACCCCC GCCTCCCGCC AGGCTCCCGG TTGGCTCCTG GCAGGCCAGC TGAGAATGAA	180
CAGGAGATGG AGGCAGGCAG CCCAGGCTGC AGAGGTGAGG GATGTGGGGC CAGGCCCAGA	240
GGGCTCAGCC TAGAGGCTTC CAATCTCAGA TTCTCCTGCC TGTGGTCA TC TGTTTGTCCA	300
TCACCCAGG ACAGGGCAGA CAGAGGGGCA AAGCACTGGG GGCCCCAGAG CCTAGCTTCC	360
CCTCAGCCTG GGGGAACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCCTTAA TACGGCCCG AATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTCATG AAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTGT TGAGCAATGT CTCTTTGGT TACAAAGTAA AAGGTAAAT      120
AAAAGTTTAA AAGCATTGGG AAAGAATGTT CTTTGGTTTT TTCCTCAGT AACCTAAAGT      180
TTAATGACCC TTTACAGTGC TGATAAACAC TTAAATTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTTG GCTAAGGTGG CAGTGACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACCAC TAAAAACTAC CTAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCTGAA ATTGGCTTAA AGAAAGTCTC      480

```


ATGACGGGAT GGGATGGGCC GGCCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCC TTCATGGCCT AGCGGAAACA ACTGAAACTA ATGGAAGATA TGGATACAGT      60
AATTAAACCC CGTCCTCAAG TAGTAAACA AAAAAACAG CGACCAAAT CTATTCACAG      120
AGATCATATT GAATCCCCCA AACACCAAT AAAGGGTCCT CCAGTCTCTA GCCTTTCTTT      180
GGCATCGCTG AACACGGGTG ATAACGAGAG TGTACATTCA GGCAAGAGGA CGCCAAGATC      240
AGAGTCTGTA GAAGGCTTCT TATCTCCAAG TCGTTGTGGC AGTCGAAATG GAGAAAAAGA      300
CTGGGAGAAT GCATCAACAA CTTCTTCAGT GGCTTCTGGA ACAGAATATA CAGGACCAAA      360
GCTCTACAAA GAACACCTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCCC AGGCCGGGGC CCTGCCCCAG CCAGGGCTGG      60
GACTCTGCAG TTGGGAGCTT GTCCAGCTGC CCCCTCTAAT GCTTTTCTCC TCCAGGACAC      120
AGGGAGCCTC CGGAAGCACA GTAGTCCCG TGTGTCACCT TAGGCTGACC TCTGTCCCA      180
GGGGTGACGT AATGCTGTCA CTGTCTGAA TTCTTCATCG TTAAACAGGG AGCCAGTGT      240
TTTACCAAA AGCAGAATTG GATTTTTTT TTAAGTCGAT AAATTTTAC TCAAGGAATT      300
CCATGTTGTG ATTTCTTCCA CTGTCCATCA AGGTCACCTT AGATCCTCTA AAGAGCTAGA      360
GTCAAAAGAT TTATCTTCAA GTTAGTCCTT TTAATGAAA CCGATGCTTA TTTAATCCA      420
GTCAGCCCTC GAG                                     433

```

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GTCCGGCTAA AGTAATCCAG TCACCTGCTG CTGATACTAG AAGGGCTGAG ATGTCACAAA      60
CAAATTTTAC CCCTGACACT CTTGCCCAAG ATGAAGGGAA GGCTATGTCT TATCAGTGTA      120
GCCTTTGTAA GTTCTATCA TCATCCTTT CCGTGTAAA AGATCATATT AAGCAACATG      180
GTCAGCAAAA TGAAGTGATA CTGATGTGCT CAGAGTGCCA TATTACATCT AGAAGCCAGG      240

```

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 563 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
 TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAG 120
 AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
 CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
 AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
 AAGAGAGCAA AACCAGAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
 CAGAAAGGGC AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTCAG 420
 AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
 CTGATGTGTA TGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540
 TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 477 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTGAGGTGT TGCCTGTCAT TCTTCTGCTT 60
 CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120
 GCCGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTTGGA 180
 AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240
 TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
 AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AACTTAAGG AAAAAAGAGG CTTGTCTGGG 360
 AAATATCAAA CATCATCAAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420
 TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTATAGGAG AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTCACGT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTCAT TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCCTGGGG AGGAAGTAGG AAGAGTGAAA GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTGAAAT CACAACGGAC TCTAAACAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 488 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAAC TGCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGTTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACTTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CCTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCGACCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:466:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAGAAAAA CATATCTTAT CCTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA      60
GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAA      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCT TAACGCTCGA G                                     381

```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTTAATTGTC TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCCCTCT AATGATATGT ATGCAGATAC      240
AGTAACAACT GTGATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAAG GCGCAGAAT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAAATTA AAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTTGGAG GAGAGGACAT      120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT      180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT      240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCCTCTTTCT CCATCAATGC TATGTTGGTT      300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC      60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT      120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG      180
CTGTGGATTG TCACCTTGAT GATTCAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC      240
CTGGCCACCC AGCTCCTCAG CCCTCTGCC CCACCCCAAC TACACACACC TTTCTCCATT      300
GTACCAGATG CTGGTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTTCAATCAC TGTA AAAACCA ATAGCAAACA ACGGAAGAGA      60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT      120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC      180
AGCCCCCAG GTATCTCCAC CTCCTTCTTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG      240
CCGAGGGACC TGTGTAACG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG      300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC      360
TGGGCGTTCT CTGAGGTCTT GGCAGCCATG TACAGGGAAT CTGAGGGCTC CCTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC      60
GCAAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAAA ACCAAAGCTT ACAGCAAAGA      120
GGGCCTGGGC CTGCCCCAGA AGGTAGATCC TGCCCAAGAG GAGAAGGAAG AGGTTGGCCA      180

```

GTGGCTCAGC AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT	240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG	300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG	60
TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG	120
AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAATATGT AAGTGATACA	180
TTTTGTTTCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA	240
CCTGAGGTCA GAAGTTCGAG	260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAGATTT GAGGAAAAGA GGTTCAAATT GGACCACTCA	60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAG ATTGGTTGGG AACTGACCAA	120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA	180
CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT	240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTTGAA	300
GAGGATATTA AGAGAGTGGG AGAAATGAGT GGCTTATACT CTCCTGTCAG TGAGGATAGC	360
ACAGTGCCTC AATTTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA	420
TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT	480
AGCACGTTAG CATCAAGACT GAAAACTCGA G	511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTTT GTCACTGTGC GAACATTGTT	60
CATCGTGATT TAAAAGCTGA AAATTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA	120
GATTTTGTT TCAGTAACCT CTTCACTCCT GGCAGCTGC TGAAGACCTG GTGTGGCAGC	180

```

CCTCCCTATG CTGCACCTGA ACTCTTTGAA GGAAAAGAAT ATGATGGGCC CAAAGTGGAC 240
ATCTGGAGCC TTGGAGTTGT CCTCTACGTG CTTGTGTGCG GTGCCCTGCC ATTTGATGGA 300
AGCACACTGC AGAATCTGCG GGCCCGCGTG CTGAGTGGAA AGTTCCGCAT CCCATTTTTT 360
ATGTCCACAG AATGTGAGCA TTTGATCCGC CATATGTTGG TGTTAGATCC CAATAAGCGC 420
CTCTCCATGG AGCAGATCTG CAAGCACAAAG TGGATGAAGC TAGGGGACGC CGATCCCAAC 480
TTTGACAGGT TAATAGCTGA ATGCCAACAA CTAAAGGAAG AAAGACAGGT GGACCCCTCG 540
AATGAGGATG TCCTCTTGGC CATGGAGGAC ATGGGACTGG ACAAAGAACA GACACAGAAG 600
GCGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

```

GGAGATTGGC CACCTCCAAG ATATGGTAAG GAAAAGTGAA CAAGGTCTTG GCTCTGCAGA 60
AGGACTTATT GCTAGTCTTC AGGACTCCCA GGAAAGGCTT CAGAATGAGC TTGACTTGAC 120
TAAAGACAGC CTAAAGGAGA CCAAGGATGC TCTATTAAAT GTGGAGGGTG AGCTAGAACA 180
AGAAAGGCAA CAGCATGAAG AAACAATTGC TGCCATGAAA GAAGAAGAGA AGCTCAAAGT 240
GGACAAAATG GCCCATGACT TAGAAATTAA GTGGACTGAA AATCTTAGAC AAGAGTGTTT 300
TAAACTTCGT GAAGAGTTAA GGCTTCAACA TGAAGAGGAT AAGAAGTCAG CAATGTCTCA 360
ACTTTTGCAG TTGAAAGATC GAGAGAAAAA TGCAGCAGAG AAACTCGAG 409

```

(2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

```

GTATGCCTGT TCCAGACCAG CCTTCATCAG CCTCAGAGAA GACGAGTTC CTGAGCCCCG 60
GCTTAAACAC CTCCAACGGG GATGGCTCTG AAACAGAAAC CACCTCTGCC ATCCTCGCCT 120
CAGTCAAAGA ACAGGAATTA CAGTTTGAAA GGCTGACCCG AGAGCTGGAG GCTGAACGGC 180
AGATCGTAGC CAGCCAGCTG GAGCGATGCA AGCTCGGATC CGAGACTGTC AGCATGAGCA 240
GCATGAGTTC AGCAGAAGAG CGGATACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GAATTCGGCC TTCATGGCCT ATGCGTGGGG GTGGGGGGGC AGGCTAGAAA GGAGCCCTCC      60
CTCCTCGGGG TGTCTAGGGT GTGCTGGCCA CTGGAAGATT GGAGTCGCTG ACCCAGTGCT      120
GACCCTGACC CTTGGCTGGG TCCACTCTGC AGACTCCACC TGAGGAGACC CACCCAGGGT      180
GAAGCTCGGT GCCCAGGCCT GAACTGAGCC CGGCCGGGTG CAAGGGCTGA GGTGTGAGGT      240
CGGCCCAGGC CTCTTCCCAG GCCTGAGGGT GGCTACAGCT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT ACTAAATTTT CAAAACGTT GATTTCATA ATACAGTGGT      60
ATGTGCAATG GATAAATTGC CGTATTTTCA AAAATTAAAA TTCTCATTTT CTTTCTTTT      120
TTTCCCCCTT GCTCCACACT TCAAACTCC CGTTAGATCA GCATTCTACT ACAAGAGTGA      180
AAGGAAAACC CTAACAGATC TGTCTAGTG ATTTACCTT TGTTCAGAA GGCGCTCCTT      240
TCAGGGTTGT GGTATTCTTA GGTAGCGGA GCTTTTCTT CTTTCCCA CCCATCTCCC      300
CAATATTGCC CATTATTAAT TAACCTCTT CTTGGTTGG AACGACCTCG AG                          352

```

(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ATTAAAAGAA TGTTCTTTCA TAAAAGACC AAAAGAAGT      60
TAAACTTAA ATTGGGTGAT TTGTGGGCAG CTAAATGCAG CTTTGTTAAT AGCTGAGTGA      120
ACTTTCAATT ATGAAATCTG TGGAGCTTGA CAAATCACA AAAGGAAAAT TACTGGGGCA      180
AAATTAGACC TCAAGTCTGC CTCTACTGTG TCTACATCA CCATGTAGAA GAATGGGCGT      240
ACAGTATATA CCGTGTCTC GAG                          263

```

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

```

GGAGCAGGAA GAAATGCAAG AGGAGATGGA GAAGCTGCCA GAGGAAAACG AGACTCTCAA      60
GAACGAGATC GATGAGCTGA GAACCGAGAT GGACGAGATG AGGGACACTT TCTTCGAGGA      120
GGATGCCTGT CAACTGCAGG AAATGCGCCA CGAGTTGGAG AGAGCCAACA AAAACTGCCG      180
GATCCTGCAG TACCGCTTCC GCAAAGCCGA GCGCAAAAGG CTCCGCTACG CCCAGACCGG      240

```



```

GGAAATCGAC GGGGAGCTGT TGC GCAGCCT GGAGCAGGAC CTCAAGGTTG CAAAGGATGT 300
ATCTGTGAGA CTTCAACCATG AATTAGAAAA TGTGGAAGAA AAGAGAACAA CAACAGAAGA 360
TGAAAACGAG AATCTCGAG 379

```

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

```

GAATTCGGCC TTCATGCTTT CTAGGCAAGA GGTCAATCAGA AGATTGAGAG AAAGAGGAGA 60
ACCAATCAGA CTATTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAAATAGA 120
GATCCTCACA CCAGAAGTTA ACAAGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA 180
GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC 240
ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA 300
G 301

```

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

```

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAACTTC CATGCCTCTA 60
ACACTCATCT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATTCTTGAA GAGCGTATTG 120
TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAATGGGCT ATCTCGAG 168

```

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

```

GCAAGCTCTC CATGGAAACC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA 60
CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG 120
AAGGAAACGC TGTAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG 180
CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA ACACCTGTTG AAAAATAAAA 240
AGTCATCTTC TCTTTTGAAT CAAAAACCTG AGGGCAGTAT TTGTTGAGAA GATGACTGTA 300
CAAAGGATAA TAAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTTGGGGG 360
CTCAAATGCA AGGTGGTTTT GGATGTGGCA ACCAGTTGCC AAAAACAGAT GGAGGAAGTG 420
AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG 452

```

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCAC CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTACCC CTGGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCACT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTAACCT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAG GAATAACCGC TCAGGTTGAG TGTAATAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTGAGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTTACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTC CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCT GCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTTAAGGAGG AATAGAAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAGGGT TTTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTTGT CCAGAATGAA      180
CTGTCTCTCA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGTT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCCTTATTTA TATAATACAC TTTATCCAG TTGTCATTTT TCTTTGTCT TATATTCTCA      480
CATGGAA

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCAAATTTTG GAAGATTTAG ACCATTATTT CTCAAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTTT CCTTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTTGCTGATT CTTTCATTTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTCGGCC TTCATGGCCT ACAAATGTTT AATCAGAGAC TCATATTCAC CTTTAAGTAA	60
AAAACATACT TCTTCCCC TAATAGTCAC AGCATTCTGC AGAGCTAAAG AAGGAGACCA	120
GGAGTCTGTG GGAGCAAAGA TCATTTTGTG AAGCTAGAGG TCCAATTAA AAGCAGTTGC	180
TGCTACAAAT TAAACATAT TTGCATTCTG CCTAAAATAG TTGTCTCTT GAACGTTGGG	240
TGCCTTTTT AGGTTGCTTT GTGAATAATA TGCACAAAAT GAAAATGTTA AAAAAACAT	300
GTAGCCTGCT AACCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA CCTGCCTCCA GCCACTTCAA ACCTTTGGTG ACCAAAGTGG GGTAAAAACA	60
AGCACCTGCG TCGTGTGTG TTATTCTATG CTCTCCAATA TATATAAATT TTAAGAAGTT	120
TTTCTTGAGG TGGTCAGTTC TTAACCAAG AAAGTGGTAG TAGTTGATTT TAATTAGTGT	180
AAAGTTGTCT TCGTAACCTC CGTGTGGTT GGAAATAGCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT CATGGCCTAC CGAATCAGAC AGAAGAAAGC CCAGGGCTCC ACTTCTTCTA	60
CAAGGTTGCA TGAGCCCGAG AAGAATGCCA GAGAAATAAC ACAGGACACA AATGATATCA	120
CATATGCAGA CCTGAACCTG CCCAAGGGGA AGAAGCCTGC TCCCCAGGCT GCGGAGCCCA	180
ACAACCACAC GGAGTATGCC AGCATTGAGA CCAGCCCGCA GCCCGCGTCG GAGGACACCC	240
TCACCTATGC TGACCTGGAC ATGGTCCACC TCAACCGGAC CCCCAGCAG CCGGCCCCCA	300
AGCCTGAGCC GTCCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCT GCGTGTCTAGG      120
AATTCGAATT TAGAGTTTAA TTTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCACAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATTCT AGAAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCTT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAACTTAG TCATTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTGT TTTGGACTAT      120
ATGTTACAAA AATTTAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                         190

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAAGGCG GTGGTCTGGA AGCAGAAAGG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AAATCACCAC      300
TCGAG                                         305

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG      120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA      180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG      240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTACTTCCTG ACCCTAACCT      300
CCGGAATCT GCTGTCAAAG GCAGATTCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTTCAGAAC A TTTTATAGAA AAGAATAATA CAAACACAC AACTGCAAGA      120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG                                     160

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTTGTCTCTG GATTTTTTAA      120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA      180
CTTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT      240
AAGCAGAAAA TTTTTTTTAA CATGAGGATA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCCTC TCTATTTCAG CCTAGTATCA GAAGGCCAGG CGAGACTGCA      120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG      180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTGT TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTTGCCCAG      240
GCTAGTCTCA AATTCGGGGG CTCAAGCAAT CCTCCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG ACATATCTTT AGATCCNNAA AGGAAAAAAA AAAAAGAAGG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTCA AGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGA CTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGGTCTCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAAGGGTA      360
CTTCCACTGA TGGAAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATGTGT CTTGACATAA GTAATTTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGGTTGCAA ATTTTAATGC ATGACTACCT      120

```

```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA      180
TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTT TGGTCTTAAC CCACCTAGGT      240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

```

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGTACT      60
AAGTAAACTA CAAAATAATT GCTAACTGA AAATTGTATA AAGTGACTG GACAGATGAT      120
GTTCTTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC      180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAAGAAAAG      240
AATCAATTAG AAATTCCACT GAAAATTCTT CTTAAATATA ACCAACTTCA TTATGACAAG      300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA      360
TGCCTTAAAT TGTTGGATTT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT      420
CGAG                                                                424

```

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA      60
TTCTTTCCCA CCATCCTTTT TGACTGTGTA CCTTGGTTTT CTCTTCTAAG TTTCTGTCCC      120
TCTGCTTCCT TACTTTTTTT CCTTTTGAAT TTCTATCTTT ATCTGTCTTT TGTTCACTTT      180
TTAATGCTAT ATATGGATCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA      60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAAACTAC TGTTATTTTT GCTTATATTC      120
TTCTCTAAAA ATTCACTAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA      180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG                          218

```


(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTCAACTG TTGGTAAAT CTCCTGGTG CCACCTTGTC GCACCCCTCT 60
GTTATGAGGC ACAGTTAGTG GGTATTGAG AGGTTTGTTT AGTGAAGCTC CTGCCACTGT 120
AGACCTAAAT GTTCTCTCC CTGTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA 180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTCTTTGG GGGCAGGCTT CCCTTTCTCT 240
CTGGCAGGTA TATTAAAAA TTACAAAATA GTAAATTTC CAAATTTTC TTGGTGTGTA 300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCCTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG 60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA 120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT 180
TCTGACAGAA TCCAGCACAA AAACAGAGAG GGTGCAGAAA AAGAGATTTC GTCACCTAGA 240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG 283

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTTC TTAAGTTGTG TACTTGGGGG CACTTTTGAT 60
TTTGGTCCCA CATCATAGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA 120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTCCTCCTC ACTACTGCTT 180
CCCTCAGATT CTGAATTGGC ATCTCCTCTT TCCTCTTCTT CTAATGAGAG GCCACCTTGT 240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTT TCCCTTGGGT TTTCTGTGTC 300
TGCTCTTCAC CATTAGGCCA TGAAG 325

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```
GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACTACTGGA      60
TACATTTCCA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA      120
ATTTCTGTGT CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCCTAATTG TGTAAATAG      180
TATTTCTTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA      240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```
GAATTCGGCC TTCATGGCCT AATTCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC      60
TGTTTTAAAC CTTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTTCCT      120
GATACCAGAC TGTTCCCGT GGTGGTGTAG AATATATTTT GTTTTGATGT TTATATTGGC      180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTTG TATCAAACAG      240
CACGCTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```
GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTTCCC AAACAGTGCT GTGGCAATGT      60
ATGAAAAGTAA TAAAAATAAT CCTTTTCTG TTAACAAAAA AATTGCTGTT ACTGCTGTT      120
TTGTTATGCT TTTGCTGGAG ATTTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGG      180
GAATCAAGCA AAACCATGGT GAAGAGATTC ATTTAAAGAG GACAAGTCTC GAG          233
```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGTCACCTTT TGTGGGAAC TCTCTCAGCG AAGCGGAGCA    60
TGCGAATTGT ACATCATGAT TGTCTGAAAA TTGGTAAGCC ACTATCCCAG AAAGAGCTCC    120
CTATGCCCCG GGCTTGCAAT GCTAAGAGAA GGAGGCAGGA GAGAGACAGG GAGCGACACT    180
ACATTGGGTG GGGTGAGGAT ATGAGGTTCC TTGGACATCA TGGCCTCCAG TGAATATGTG    240
GGTGATGGCT TGGAACTTAA GCTTTTTTGC TAGTGCCCCA CAAAAGAGTA CCTTCCACAA    300
CCCATCTGTG GACCACAGCA GTGCCTCTCA ACAAACATGT GCCCAAGGA GTCTCGAG    358

```

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT AGAATAGAGG AAAATAGCCG CCTGGTGGCT AGACAATTTA    60
GGTGTAGAAA ACACATTAT ATGGTTCTTT GAATGTAACA GTGGTAAAGA ATATAGGTTT    120
AGTTGTTGCT GCTAAGTAGG GGGAAATGAC ATTTTATCT GGTATGTTTG AGAATAAAGT    180
AAATTTCAAA ATTTGAGATG ATCGAAGTTT TTATTATATA ACTTAAGTAT TATTATAATA    240
TGTTACATAT TTTATTCTTT AAAAATTGTA ATTCAGAGAG TGTAACAAAA TGTACTTCCT    300
CACTTTCTTG CTTTTTGTTC CCCAGAAGTA ACTCGAG    357

```

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

```

GAAAAGATGG AAGAAAACCA CCATAGCACT GCAGAAGAAC TACAGGCTAC TCTACAAGAA    60
TTATCAGACC AGCAACAAAT GGTACAGGAA TTGACAGCTG AAAATGAGAA GCTGGTGGAT    120
GAAAAGACGA TTTTAGAGAC ATCCTTTCAT CAGCATCGAG AGAGGGCAGA GCAGCTAAGT    180
CAAGAAAATG AGAAGCTGAT GAATCTTTTA CAAGAGCGAG TAAAGAATGA AGAGCCCACC    240
ACTCAGGAAG GAAAAATTAT TGAAGTGGAG CAGAAGTGCA CAGGTATTCT TGAACAGGGC    300
CGCTTTGAAA GAGAGAAGCT ACTCAACATT CAGCAGCAGT TGACCTGTAG CTTGCCGAGA    360
CTCGAG    366

```

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT    60
GTCTCAAAAA AGAAAAAGAA AACAAATCCA GGATTATTAT TTCTACGTAA ATGTGACATA    120
TTATTCTAT  GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCCAAT AATGATTATG    180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTCAC AAAGTATTTT    240
AAAAATTAATA TCCTGTGTAT TTCAAAAGAC GATGGTCCTA TTTTAAGAAA AATAACCTTG    300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT    60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC    120
AGCGGCACTT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA    180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA    240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG    300
AAAGCCCCAG TCTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC    360
ATCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC    60
TGCAATGATA CTGTTGTCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT    120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTC ATAGATACAT    180
ACCCATCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT    240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT    300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG    360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGCCTA CTTTGGTAAC AGAAGAGAAG ACTGTGGAGC CAGCTACCGT      60
CTCAGAAGAA GCAAAGCCTG CATCTGAACC TGCTCCTGCC CCTGTGGAAC AGCTGGAACA      120
AGTAGACCTG CCCCCAGGAG CAGACCCCGA TAAAGAAGCT GCCATGATGC CTGCGGGTGT      180
TGAGGAAGGT TCATCAGGTG ACCAGCCGCC TTATCTGGAT GCCAAGCCTC CAACTCCCGG      240
GGCCTCGTTT TCCCAGGCAG AGAGCAACGT AGATCCAGAG CCTGACAGTA CCCAGCCACT      300
TTCAAAACCA GCTCAGAAGT CTGAGGAAGC CAATGAGCCA AAGGCCGAAA AGCCAGACGC      360
CACTGCAGAT GCTGAGCCTG ATGCAAACCA GAAAGCCGAA GCTGCTCTG AGTCTCAGCC      420
CCCAGCTTCT GAAGATTAG AGGTTGATCC TCCAGTTGCT GCAAAGGATA AAAAGCCAAA      480
CAAAGCAAG CGTTCAAAGA CCCCTGTTCA GGCAGCTGCA GTGAGTATCG TGGAGAAGCC      540
CGTCACAAGG AAGAGTGAGA GGATAGACCG GGAAAACTC AAGCGGTCCA ATTCTCCTCG      600
GGGAGAAGCA CAGAAGCCTT TGAATTAAA GACACTCGAG                                640

```

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCT AGCAAGAGAA AGAGAAGTGC AAACACTCCC ACGGCGAAGC      60
GCCCTCCGTG GACGCGGATC CCAAGTTACC CAGTAGCAAG GAGAAGCCCA CTCACTGCTC      120
CGAGTGCGGC AAAGCTTTCA GAACCTACCA CCAGCTGGTC TTGCACTCCA GGGTCCACAA      180
GAAGGACCGG AGGGCCGGCG CGGAGTCGCC CACCATGTCT GTGGACGGGA GGCAGCCGGG      240
GACGTGTTCT CCTGACCTCG CCGCCCTCT GATGAAAAT GGAGCCGTGG ATCGAGGGGA      300
AGGTGGTTCT GAAGACGGAT CTGAGGATGG GCTTCCCGAA GGAATCCATC TGGATAAAAA      360
TGATGATGGA GGAAAAATAA AACATCTTAC ATCTTCAAGA GAGTGATGTT ATTGTGAAA      420
GTTTTTCCGT TCAAATTATT ACCTCAATAT TCATCTCAGA ACGCTCGAG                                469

```

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACCCGTTTCC TCTAGTTTCT TCCTGTAGTA CTCCTCTTTT      60
AGATCCTAAG TCTCTTACAA AAGCTTTGAA TACTGTGAAA ATGTTTACA TTCCATTACA      120
TTTGTTGTGT TTTTAACT GCATTTTACC AGATGTTTGT ATGTTATCGC TTATGTTAAT      180
AGTAATTCCC GCGGCCTTCA TG                                202

```

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTGAAAAAT	60
AGTGTTCCTT	TCCCTGATAG	GCCTGTTCTG	CATCATTCTT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCACTTT	TATATTTTTC	CTCTTCGGTC	CAGAATTTC	TATTTAGTTT	180
CTTGATTTT	GCCTACTCCC	TCCCTTCTCC	ATGATTCAGC	CTAGTCTTTC	CGTCCCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCACC	TCGTCTTTTG	CTGCTGTTAG	CCCTCCCGCC	300
TGCGCACCTG	CCACTTCACC	CTCGCTGTG	GTCCACTTAC	GTTCCACTCA	GCCCGGTCAG	360
TCCTGCTTTG	TTCTTCTCCA	CGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTTATT	TTGTTTTCTT	CCTGTGCTTG	TTAGTCCTTG	TGCACTTGGC	480
CCTTTTCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCC	TTCATGCCTA	GGAAATTTCA	CCATTGGGTC	TCCCCCTTTG	TGGGTCAGCA	60
GGTGGTCAAG	ACAGGGGGCA	GCAGTAAGAA	GCTACAGCCC	GCCAGCCTGC	AGTCTCTGTG	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAAGAA	ATTATTCCTT	AGATTGTGATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	CAAAAGAAAG	TGCAGAAGGA	240
AGGGGCTGCG	GACCCAAAGC	AGGTGCGGGA	GCCCAGCGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCGCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCCT	GGCTGACCCA	120
GGAACTTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCCTCG	TTGACCACAA	AACATCTGTA	180
AAGACTCACC	ACCAAGTGTA	CGGCCAAGCC	ACTGAACTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	GTAATGCTGA	TCAACCTCCA	GTTGACAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGCT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATTT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCTGCAAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACTA	TCCCACCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAAGTA	ATTCCAAGCA	AAAGACCAAG	CTCTTTTCCC	AAGACTCGAG	600

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

```
GAATTCGGCC TTCATGGCCT ACTTTCTTCT GCTGGCTTCC ATCTTGCCAC ACTTTCTTGC      60
TCTTCCTTCT AACTGAAAGA CTAATTCTCC ATCCCCTCTG CAGGCTCTTT TGCTCCACCT      120
GATATTTAAA TGTTGGAATG CCTAGAGTTG TTCTGACCCT TCTTTATCTA CCCCATTTC      180
CTCAGTGATC TTATGCAGAG GTCTCCCAA GTTTACATGG CTATCCTTGA CCTCCTTCCT      240
GAATGCAGC TGGTGTGAGC TGCCGTCACT TGGATGTTTA ATCAGCAACT CAAGGTTTAC      300
GTGATGATTA GACCGCAGTT ACCCCAGAC TTCTTATCC CTTAGTTTTC CCCATCTCAT      360
TAAGTTCACT TCCATTCACC TTCTTGATGA AGCCAAGTAT TTCAGAACTA GCCTTGTTTC      420
TTCTTTTCA CTTTCCCCCA TATCAATTCC AGACTACCCA CTCGAG                        466
```

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```
GAATTCGGCC TTCATGGCCT ACATTGTAGA AGAGATCACA GAAACCACAA AAGGTTTCT      60
GAAGTATATG GATAATCAAT CATTTGCAAC TGAAAGTCAG GAAGGAGTTG GTTTGGGACA      120
TTCACCTTCA TCCTATGTGA ATACTAAGGA AATGCTAACC ACCAATCCAA AGACTGAGAA      180
ATTTGAAGCA GACACAGACC ACAGGACAAC TTCTTTTCCT GGTGCTGAGT CCACAGCAGG      240
CAGTGAGCCT GGAAGCCTCA CCCCTGATAA GGAGAAGCCT TCGCAGATGA CAGCTGATAA      300
CACCCAGGCT GCTGCCACCA AGCAACCACT CGAAACTTCC GAGTACACCC TGAGTGTTGA      360
GCCAGAACT GATAGTCTGC TGGGAGCCCC AGAAGTCACA GTGAGTGTCA GCACAGCTGT      420
TCCAGCTGCC TCTGCCTTAA GTGATGAGTG GGATGACACC AAATTAGAGA GTGTAAGCCG      480
GATAAGGACC CCCAAGCTTG GAGACAATGA AGAGACTCAG GTGAGAACGG AGATGTCTCA      540
GACAGCACAA GGCCTCGAG                        559
```

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```
GAATTCGGCC TTCATGGCCT ACGCAGTGGT TCAATTTTCT TCGAAACGGT GTGGTCCCTG      60
CAAAAGGATG TTTCTGTGTT TCCATGAGCT GGCTGAAACT TGTACATCA AAACAATACC      120
CACATTTTCA ATGTTCAAGA AAAGCCAGAA GGTAACCCCTA TTCTCAAGAA TCAAAAGAAT      180
AATTGCTGT TATAGAAGTG GATTCATGAG CAACCTGATT TTTGAGTTT GTGGAGCCGA      240
TGCTAAAAAA TTGGAAGCCA AGACTCAAGA ATTAATGTAA GCTGATCTCC AAGGCAAAAT      300
ACACTTGTGC CGCTCGAG                        318
```

(2) INFORMATION FOR SEQ ID NO:528:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA    60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA    120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC    180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG    240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:529:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TTAAATTGA ATGAAAGTTT GGCATTTTAA    60
AAACTTTAG GTGATTTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC    120
ATATTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG    180

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGATCCCTC TGCTGCTGCC GCTGCTCCTG CTAAGTGGCC    60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT    120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC    180
TGACGCTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG    240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC    300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA    360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA    420
AGCTGGAAT ACTGGAGACC ATCGTGGA GAATAGTAAG AGCCCTCGAG                    470

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCC	TTCATGGCCT	AGAAAATTCC	AGAAAGGATA	TTTAAGAAAA	TACAATAAAC	60
TATTGGAAAG	TACTCCCCTA	ACCTCTTTTC	TGCATCATCT	GTAGATACTA	GCTATCTAGG	120
TGGAGTTGAA	AGAGTTAAGA	ATGTCGATTA	AAATCACTCT	CAGTGCTTCN	TACTATTAAG	180
CAGTAAAAAC	TGTTCTCTAT	TAGACTTTAG	AAATAAATGT	ACCTGATGTA	CCTGATGCTA	240
TGGTCAGGTT	ATACTCCTCC	TCCCCCAGCT	ATCTATATGG	AATGCTTAC	CAAAGGATAG	300
TGCGATGTTT	CAGGAGGCTG	GAGGAAGGGG	GGTTGCAGTG	GAGAGGGACA	GCCCACTGAG	360
AAGTCAAACA	TTTCAAAGTT	TGGATTGTAT	CAAGTGCCAT	GTGCTGTGAC	CATTATAAT	420
GTTAGTAGAA	ATTTTACAAT	AGGTGCTTAT	TCTCAAAGCA	GGAATTGGTG	GCAGATTTTA	480
CAAAGATGT	ATCCTTCCAA	TTTGAATCT	TCTCTTGAC	AATTCCTAGA	TAAAAAGATG	540
GCCTTTGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 843 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC	AGAGAGGCCT	ACTTCTCTTA	GTGATTTCAT	GTTTCAACCA	GTACATTGTG	60
GTGAATACTG	AAATATCTTG	TTTAATTTCAG	ATAATTAAAA	TGGTGGCAAA	GGAAGCTGTT	120
TAGCCAGAGC	CCTTCTTGAC	TTTGAGGAAC	AGTGGTAGTA	TAAGACTTGA	AGACAGACGT	180
GTA AAAAGTA	CTACTCACTG	GTAGGCTCAG	GCTCGGTTGA	TTGACTGATT	CTTGAGACGG	240
AATGTCGCTC	TGTCGCCTAG	GCAGGAGTGC	AGTGGCCCG	TCTCGGCTCA	CTGCAGCCTC	300
CGTCTCCGGG	TCCAAGCGAT	TCTCCTGCCT	CAGCCTCCCG	AGTAGCTGGG	ACTACAGGCG	360
CCCGCCACCA	CACCGGGCTA	ATTTTGTAT	TTT TAGTAGA	GACGGAGTTT	CACAATATTG	420
GTCTCGAACT	CCTGACCTCA	GGTGATCCAC	TCGCCCTGGC	CACCCAAAGT	GCTGGGATTA	480
CAGGGATGAG	CCCCTGCGCC	TGGCCTCGGT	TGAATTATT	AAACAACCTT	TGTGGGCAGC	540
AAGCTGTACG	AGGTAACTA	TGTGATGAGA	AGACTTAGAA	ATGGAGAAAA	GTTTTATCAG	600
TTCTACATAG	GACTTAGTTT	GGGAGTTTCT	GGAAACTACG	TTGGAAATCA	GTAGTTGCAC	660
ACTAGCTGAA	TTGAGCTGTG	TAATTTACAG	TGATTTGTTA	TTTACCAAAT	AAGTAGAAGA	720
GGGAATTAAG	AAGCTAAAAT	CTCTGGGTAC	TGTTTGATA	TGAATTTGTT	AATTGTTTAT	780
ACTCAGGTAA	TAAGTGTTAC	CTCAGTCATA	GCATTTAATA	TTTTATCTGA	CTGTCCTCTC	840
GAG						843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GAATTCGGCC AAAGAGGCCT ACATCCAGAA ATTTAGGGAC TCAGCCCTGG TCAGGGTGGC      60
AAAGGGTCTG TTTGTCTTTC CCCATTAGAC AGAGGTCTTG TCCTGCTACC CTAATTGTAA      120
AGGGGTGCCT GGAAGGGGT GGTAGGACA TGGTGCGGT GGAGACTCCG GCCCACTTC      180
TCCAGGCTTT GCTGACAGG GCCTGCTTTT AATTTTATT TTTATTCCAT GACTTTTAA      240
AAAAGAATCC CGTAACCTCT TTTTCATAAC TTTTTTGTG ACTTTTCATA ATACTGTTT      300
CTACTTTGTT CCCACAAGTT TTTTGCCAC AACGTTTATA CATTTTATAT CCCATAACTT      360
TTTCACCCCA TAACTTTTTT AAATAAAGTT ATTTAATAAA ATAACCTTTT ATAAAACTTT      420
AATAAAAGTT TTTTAATTAA CCCATAACTT TTTTATTTG GTTTTAAATA AACACTTGCA      480
TAGTTATATT ACAACTTTGT AAAAATGAAA CACATTATCT CAGGC      525

```

(2) INFORMATION FOR SEQ ID NO:534:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GAATTCGGCC AAAGAGGCCT AGAAAACCCT TGAAGACATG TTGAAAATAC ATACTCCTGT      60
TAGCCAAGAA GAAAGATTGA TTTTCTTAGA CTCCATTAAG TCCAAATCCA AAGACTCTGT      120
GTGGGAAAAA GAAATAGAAA TACTTATAGA GGAAAATGAG GACCTCAAAC AACATGTAT      180
TCAGCTAAAT GAAGAGATTG AAAAGCAAAG GAACACTTTT TCATTGTGCTG AAAAAAACTT      240
TGAAGTTAAC TATCAAGACT TACAAGAG      268

```

(2) INFORMATION FOR SEQ ID NO:535:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 224 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GGCTTGACCC TCGGCGATCC CCGACTCCCT TCTTTATGGC GTCGCTCCTG TGCTGTGGGC      60
CGAAGCTGGC CGCCTGCGGC ATCGTCCTCA GCGCCTGGGG AGTGATCATG TTGATAATGC      120
TCGGAATATT TTTCAATGTC CATTCCGCTG TGTGATTGA GGAGGTTCCC TTCACGGAGA      180
AAGATTTTGA GAATGGCCCC CAGAACATAG ACATTCCTCT CGAG      224

```

(2) INFORMATION FOR SEQ ID NO:536:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGGCC TTCATGGCCT ACCACTCTGG CCCAGCGTC ACTGGCCTAG GGACACATGG      60
GGGTGGGGAT TGTTTGGCCT TCCTGGCTTA GGTCTCTGGA AGAGAGAAGA ACCCCATGGG      120

```

GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT	180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG	240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCC CCAGCTCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA	60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTCTTTT	120
TTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG	180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT	240
TCGAAAGGTG CAAAAGGAAG TCCTCCATCA CTAGCTCAGC TGTTATGGTC CTTGAAGTGC	300
CCTTGCCCGT CTGTCTTTTT ATTAATCCTT TTTACCTGTC GAGTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG	60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCCTG CAAATTTAGT ATCAAATGCA	120
CCTTATGATC GTCTAAAACT CAGCCTGCTG ACCAAAGTCT GGAACCAGAT AAAGCCTTAT	180
ATTCGCCACA AAGATGTTAA TGTTCGTGTG TCAAGTCTCA CACTCTTGGG AGCTATAGTG	240
TCCACCCAG CACCTTTACC TGAAGTCCAA CTACTTCTGC AACAGCCATG TTCTTCTGGA	300
CTCGGTAATA GCAATTCAGC AACCCCTCAC CTCAGCCCCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC TTCATGGCCT ACAAATCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC	60
TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT	120
CCCAGCCAGT GCAGGTGGGT CAAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG	180
TTGCCACTGG GGGGAGACAG CATTGTTTAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG	240

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
CAGCATCTCT GGTCACTGGC CCTATAGCCG TACAGACTAC AGCTGGAAAA CAGCTCTCGC 120
TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCACT GTACCCACAA 240
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT 180
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
GAGAATGAGA ACTCCAGTTG CTGTGTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
ATTTCCCACT GTTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTTCATAT 420
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC TTCATGGCCT AGACACGGGA CATAAAAACT TTAAATGAAG GAGGACACAG 60
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180
TCTGCCAGTT GGCATGTCC TTGGACACGG CGCACCACAG CTCCTCATGC CGAGGCTCTG 240
CACTCTCACA GCGCTTCCTC ACCTCTCCTC GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

```

ACTTGTAGAA GAAGGCCAG GCATCCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA 360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAA CAGCTTGGCC ACGGCCAGGA 420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG 480
GCCTTGCCCT GAG 493

```

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA 60
AGCAAAAAGC CCAAAGAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG 120
CAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA 180
TTCTAAGGCC AAAAATAAAA ACCTCTGCAA GTCCGCGTAG CTTCCAGGAC TCCTGGGCAT 240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG 300
AAAGTTGCAT AACTGTGGCC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA 60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGTTATATA 120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTAGATT 180
CCTTTATTTT TTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA 240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC 300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GCGCTCTGTA TCATGACTAT 360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC 420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG 473

```

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAGTG 60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG 120

```

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCTTAGA AATGGAAAAA GCATGCAAGA GAGATGTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTGTAAAG      240
TAAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATACTTACCA      300
AAAGGATGCT GAAGGGGATA TTGGAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CCTTCCAGAG CCCATCTGCC CCGCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCTGGTA AGCAAAGAGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCTCA      120
CTGTCTCAAC ACGAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGGTGGGAGG AGAGAGAGGT	60
AATCAGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAAA AGAAAAGAAT	120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACTCAC TTCTCTGTG GGTGGAGGAA	180
ACCATTCCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA	240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GCAGGAGAGA AAATTGAGGC TTAGGTTAAG AAACCTACCC AAAGTCAAAC AATTTAATTG	60
GTTTGGGAAG ACCAGGAAGA CTTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA	120
ACACTTGACA GCAGGTTTAT ACAAAGACAG ATTTGGGTATC TTTGGAGGGA ATGAGTTTCC	180
AGTCATTGCA GGTGGTCCAG CAGAGAGGGC CACTCTCCTT TTTTCTTTT TTTACTCCCT	240
TTTTGATTCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

AGGCCATGAA GGCCCTTCC ATTCTTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT	60
CTTTTGTAC TGAGGAGTTA GTCCCATTA GTTCTGTAT CACATTTTCA TTTGCACGAC	120
ATTACTCGCA GGTGGTGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG	180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTTGCCTCCC TTACCCTCAT TTTCCAAACC	240
TCTTGTACCC TCCTCTCCCT CCCCAGCTG GCCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

```

GAATTCGGCC TTCATGGCCT ATGCACTTCT TCTTTCTCTC CTCCTTTTGC TGGGTGCTTA      60
CCGAGGCCTG GCAGTCCTAC CTGGCTGTCA TTGGGCGGAT GCGCACCCGC CTCGTTCGCA      120
AGCGCTTCCT CTGCCTGGGC TGGGGTCTGC CTGCCCTGGT GGTGGCCGTG TCTGTGGCT      180
TTACCCGAAC GAAAGGATAC GGTACATCCA GCTACTGCTG GCTCTCCCTG GAGGGCGGCC      240
TGCTCTACGC CTTTGTGGGC CCTGCAGCCG TCATTGTCCT GGTGAACATG CTCATCGGAA      300
TCATCGTCTT CAGCAGCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```

GCCAAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA      60
GGATTCCCCA GCATCCTGGG ACCCCCACGG AGACCAANCC GTCATGACAA CAGTGCAATT      120
GGCAGAGCCA TGGAATACA GAAGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT      180
GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA      240
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCCTTCTG TAGCTTCAGG GGCCTCTTTT      300
TCCAGGAAG GAGGAAAGA GAATGATACA GGATCAAANC AAGTTGGAGA AACATCAGCA      360
CCTGGAGACA CCTTAGATGT CACCCTCGAG                                         390

```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GACGGCTACA CCATGGGCGG GCTGCTGCGG GCCGCCCGGC TGCCGCCGCT GCTTTCGCCG      60
CTGCTGCTTC TGCTGGTTGG GGGAGCGTTC CTGGGTGCCT GTGTGGCTGG GTCTGATGAG      120
CCTGGCCAG AGGGCCTCAC CTCCACCTCC CTGCTAGACC TCCTGCTGCC CACTGGCTTG      180
GAGCCACTGG ACTCAGAGGA GCCTAGTGAG ACCATGGGCC TGGGAGCTGG GCTGGGAGCC      240
CCTGGCTCAG GCTTCCCAG CGAAGAGAAT GAAGAGTCTC GGATTCTGCA GCCACCACCA      300
CTCGAG                                         306

```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCACCCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCACG TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAATGG TGTCCCGGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGGG CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCG      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAG GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTACC      180
CTATCCCAGT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTTGC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT    120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA    180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT    240
GAAGGACTTC AGCATTTGGG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT    300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC    360
TGTCTGTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG    420
TTCAGTCGAG AGTTCCAGTT GCACCAGCAT CTCTTTGATC CGGAAACACT CGAG      474

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTGG TTGTTGTTTC CTTTTGTAT TTTACTGATA    60
TCACCAGGAT AGTTTACTCT CTTCTAGCT TTCTGCTTAC CGCAGACTGG ATAACACACA    120
CATACACACC CACAAAAATG CTCATGAACC CAATCCGGAG AAGGTTCAG CAGGTCCCCC    180
ACCTCCCCCT CCTCCTCCTA CTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG    240
ACACCTGGGC AGACCGCGCG GCTCTCCCC CACCCACCC CGTCCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGTG    60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA    120
GAAACATGSC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTT AGAATGTACA    180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC    240
TCACTGGTGT CTTTTCCTCT TCAAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC    300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTGTGTTT TTGTGCGTGA TTAGCCTCGA    360
G

```

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA    60

```

```

GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCGGCC AGTGTCGCCC TGCCCTTTT TAAAAA AAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

```

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTC 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCCT 180
TCTCTCCTC CCAGCACATC TGTGAATCT TTAGCTGGT TACCACTCCC AACTCTCTC 240
CCAGCAATGC AGATCTTCTA CACCCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCGAACA GCTCGAG 317

```

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTTC CTCGCCTGGC TTGTGAAGAA 180
CGTGTATTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCTGA GCATGGTGAC 420
CGTGGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAACCTCG AG 472

```

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCGG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TCGTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTGCGAG TTTTTCCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTTGAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACTA      240
ACACAGAGCC AAAGACAAAA ACCACTCGAG                                270

```

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTTG ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTTG TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTAAAT AACTATTATG ATCAAGGATA      120
TGGAAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTTACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT 240
 TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300
 CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT 60
 AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACTTGC 120
 AGCAACTGCA GTAGGTGGTG GCTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT 180
 GCAGATTGAC TGGAAAGAG TTGAAAAAGA TGTAATAAA GCAAAAAGAC AGATTAAGAA 240
 ACGAGCTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC 60
 CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC 120
 GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA 180
 GGAAGTCGGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG 240
 AAAACCCCTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAGA TGAATGTAG 300
 TCGCCATAAA GTATGCATTG CTCAAGATTG TCAGACTGCA GTCTGCATTA GTCACCGGAG 360
 GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT 420
 ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA 480
 TACCTACTCT TTTCACTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT 540
 CGAG 544

(2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT 60
 CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA 120

```

GAGTCCCAAA CTTCTGAACA CGAACTCTTT CTAGACACCA AGATATTTGA AAAAGACCAA 180
GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTA CTCCACA TAGCTGGGAG 240
GAAGAGCTGA ATCACTATGC CTTAAAGTCA AATGCTGTGC AAGAGGCTGA TTCAGAATTG 300
AAGCAGTTCT CAAAAGGGGA AACCTCGAG 330

```

(2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```

GAATTCGGCC TTCATGGCCT AAGGGAAC ATTTTGCATG TGTAAGCTT CATGAAGTTC 60
TCTTTAAAAA ATACCAAAGC TTGTTTATTT CTGATAATTA ACCTAAGCCC TTATGAAAAT 120
AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CCAAAAGGAA CAAAGGGGCC 180
TGCGTTAAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGCCGTC TTGATGTTTA 240
AAAAACCCAG GGTCTCCACC CTTCTTTGA TTTGTGCAAT TCTGTCTTC ACAGTTCCGG 300
AGCTTACTCG AG 312

```

(2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

```

GAAAATGTTT ATGGCCGAG CAGGAGTAGA GGTCTGAGC CTCCTATTTT TCTGCATCTA 60
CTGGGGTCAA TATGCCACCG ATGGCATTGG CAACGAGAGT GTGAAGATCT TGGCCAAGCT 120
GCTCTTCTCC TCCAGCTTCC TCACTTCTCT GCTGATGCTT ATCCTCCTGG GGAAGGGATT 180
CACGGTGACA CGGGGCCGCA TCAGCCACGC GGGCTCCGTG AAGTTGTETG TCTACATGAC 240
CCTGTACACG CTCACCCATG TGGTGCTGCT CATCTACGAG GCGGAATTCT TTGACCCAGG 300
CCAGGTACTG TACACGTATG AGTCGCCGCG CGGCTACGGG CTCATTGGAC TGCAGGTGGC 360
GGCCTACGTG TGGTTCTGCT ATGCTCTCGA G 391

```

(2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

```

GAATTCGGCT TCATGGCCTA AAAAAAATC CAGAAAAAAA CAACAGCGCG GTGGTGGGGT 60
TTTGTTAATT TCGCCTTTT TTTTCTTTCG ACGCGCCACG AAATTCAGGC TCGGTTTAGC 120
TCCTGAGAAA TATCCAAAGT AATTGCAGAT TCGGAGACG CACAGCATTG GTTCAAAAAA 180

```

```

GACCCGAGGC ATTGGGGCAG GGTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC   240
AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTTC CCTTTTCTTC TGGCTAGCCA   300
TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTTGC   360
TAAGGGAACCT CCTCGAG                                         377

```

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

```

GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACTCCCA AGCCCCCTCC TTGTCTGTGC   60
ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACTGG CGCCATCGCC GGGACTCCAG   120
AACCCGAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG   180
CTCACGTGGG AACCCCCCTC CCACCCTCGC GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG   240
AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC   300
CACAAAGGAG CAGAGCTGCC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```

GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA   60
CCACACCCCG CTGGGAAATA TCTTAAAAGA ATCAAATAAA GAAAGTTACT CTAATAAAT   120
CGTGTGCTTT TTCTGTGTGT GATTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA   180
GAAAGATCCA TTTAGCTTAT TTTTCTCTC TTGGGTTAT TTTTCTCTC CTTCATTG   240
CACAGCCTCC CCCCATAAA AAAATAAAGA TATAAGTCT ATCTTCTCCC TCTGTCTAGT   300
TTAAGTAAAA AGAATTTTG CTTCATTAT AATAATAGAA TTTGTGTGTA TATAATATAG   360
GCAGTGATTT GGCCTCAAGC TGAGTTTAGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC   420
AGCCAGCCCA CTCTCGAG                                         438

```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```

GAATTCGGCC TTCATGGCCT ACTGNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC   60
AACAGTTCAC TAGGGTTCCC TTTCTCCAC ATTGTTGCCA ACATTCTTTA TCTTGTGTTT   120

```

```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTC 180
ATTTCCCTAA CGGTGGTGA TACTGAGCAT TTTGCATAC ACCGGGTCAT TTGTCTTTG 240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC 300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG 360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG 420
CTCTTTTGCC CCTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA 480
AGCCCCCTC ACCAGACACT GTATCTCGAG 510

```

(2) INFORMATION FOR SEQ ID NO:577:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA 60
CAGAGGTATT TCCTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT 120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGT TATTGCCTTT TAGTCACAGG GATACACCTT 180
TTATTCATTT ATTTATTTAT TTACCAGTCT CATTAGCAG TAGGAATGCA TCTTAGCATT 240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG 276

```

(2) INFORMATION FOR SEQ ID NO:578:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC 60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTATTTT GCAACCAGAA 120
TGCTCTAGTT CTACAGATAG CCCTGTCTGG TATACGTCTA CTTCACTGGA CCGAACACCC 180
TTGGAAAATA TGCTTGACG GGTTCCTTCTA GTAAAAGATA TTTATGATAA AGACAATTAT 240
GAACTGGAGG AAGACACTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:579:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTTAAGAG AGTTTGACTA AGAAAGAGCT 60
GTTTGAAACC TCCTGGCTTA TGTATTTTGA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG 120
AGTAGAGTTT GTGCATTGTC AGTATAAGAT TATCATTATC AAACATTCCT ACTAGGCCTT 180

```


TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCTCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCACCTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 740 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACCTC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCCT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTTAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCACTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTTAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GAATTCGGCT	TTCATGGCCT	ACAAAGGGGT	AGCAAGGCAT	GTCTTACATG	GTGGCAGCAG	60
AGAGAGAGAG	CAGGGAAAAC	TGTCATTTAT	AAAACCATCA	GATCAGTTGG	GTTGTGCAAA	120
TGGTGGAGAA	GAAAACCTCA	GGAAGAGTGC	ATAGACTGAG	CAGAGAAGAG	GACCAGCTAC	180
CTCCGTAGAG	GCAGGGAGAG	CAGCCAAGCT	GGAGCCTGAG	CAGCATTGCT	GGACATGGAG	240
AAGGTCTGGA	ATCTTGTCAA	GGAAGCAAGC	AAAGGGTTTC	TTTCTATTCA	ATGAAGTCCA	300
CTCCCAGGAC	CCTGGGCAGC	AACGGGTGCT	GGACTGGGCC	ACCTGGCAGC	GTACATCAA	360
CTGGCAGCTA	GAAGTCTTGG	AGAATGACAA	CTTCCAGGAC	GACCCCATG	TGGGACTCCC	420
TCAGCTCAGC	AAGAGACTGC	CACAGTTCGA	TGATGATGCA	GACACCAGAC	AGTAAAGAA	480
GAAAACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC	AAAGAGGCCT	AAACAGTCCA	GAGAGGCATA	AATCAGACCC	AGTTCCTAGC	60
TGGCTTGTC	TTATCAAGTA	AATGGAAAAG	GGGCCAGGCC	AAAGCAGGGC	AAGATGACCT	120
TGGACTTGGG	AGAGACTTGG	ACTCATGCCA	CAATCCTAGG	GTGCCCCTG	GACCATGCT	180
TTTCTGAGTT	TTGTAGTCAT	TCGGTGCTG	AAGTAAGGTA	GATTGAAGTG	AGGCCTTCGG	240
TTTCCATCTG	GACCCCTTCT	CTCCTGTTTT	CTTTTTTTCC	GCCTTGTCCT	AGGGATGTT	300
AATAGCCCAG	AAATGCAAGC	CCTCCTCCAG	CAGATCTCTG	AGAACCCCCA	GCTGATGCAG	360
AATGTGATCT	CAGCACCTCA	CATGCGCAGC	ATGATGCAGA	CGCTTGCCCA	GAACCCCGAC	420
TTTGCTGCTC	AGATGATGGT	GAATGTGCCG	CTCTTCGCGG	GGAACCCCCA	ACTGCAGGAG	480
CAGATCCGCC	TGCAGCTCCC	AGTCTTCTCG	CAGCAGATGC	AGAACCCAGA	GTCACTCTCC	540
ATCCTTACCA	ATCCCCATAC	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GAATTCGGCC	TTCATGGCCT	AGTTGAAAAT	GATCATTACA	CAATATATTC	CTAAACATAA	60
ACTGAGTAAA	CTTGAAACAG	CTCACTGTGT	GGAGAGGACC	ATCCCCGTTT	TGCTCACCAG	120
AACCTGGAGAT	TCTTCTGCCC	GCCTCCGCGT	CACAGCTGCA	AATTTTATTC	AGGAAATGGC	180
CTTGTTTAAA	GAAGTTAAGT	CTCTCCAAAT	TATTCCATCC	TACCTGGTGC	AGCCATTGAA	240
AGCAAACCTCT	TCAGTTCACC	TGGCAATGAG	TCAGATGGGC	CTCCTGGCCC	GGCTGCTGAA	300
AGACCTGGGC	ACTGGCAGCT	CGGGCTTCAC	CATTGACAAC	GTGATGAAGT	TTTCAGTGAG	360
TGCCCTGGAG	CATAGAGTGT	ATGAGGTCCG	CGAGACGGCG	GTTCGAATTA	TTTTGGACAT	420
GTACAGACAG	CACCAGGCTT	CCATCCTGGA	GTACCTTCCT	CCAGACGACA	GCTAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAACTTC ATTCAATCAT ATCTTCAACA      60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC      120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTTCAC      180
TATTCTTCCA CATTCTCTAT TATTTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA      240
ACTAATACTC ACAGGACAC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA      60
TTGGAATATT TAAGTATTTG CATAAAAAAT CAAATGGTAG TGTTTGTAA TCTCTACTGT      120

```

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA      60
AAGACAATTT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA      120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCAGAG      180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA      240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG      300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG      360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA      420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCACT GTATGAACT AAGGAAGGCG      480
AAACGACTAG ACTCACTCTC GAG                                     503

```

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTTCTAA AATTAGCTAA GAAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTCTCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATCCCT ACTCGAG                                     567

```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```

GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTGTATC TTCTTCCCCT TCTTTTCTTC    60
CCCTTCTTCT TTCTTCTTTT GATCTTCTTC CCCTTCTTTT CTCTCCCTTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                     138

```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```

GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAAATGAAAT CTGATTCTTT TGCTCCCAAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CTTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420

```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGCT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAACTG AAGGCATTTT TTTTTTCTG CTGCCTTTCC CAAAGTGGTT AGGTTTGGA      360
AAGAGATGAT GATGGTAATA TTTATTGTG CTTTTAAGC CATTTCCTCC AATGGGACTA      420
GCATGCTTGT TTTCAGTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTTCTATC TNCACTTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGGTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAACT GCATGGGACA GACTGAGTTT TGTTCCTCTC      120
TTCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCCAGTA TGTATGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CCTTTCAGGG TCCCTCAGCT GTGAAAGTGG AGCATTCATA      240
TCAAGACTAC ATCTTTCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AATCCATTTC ACATAACTTG      360
TGAATATGTT TTCTTCACT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTTGGCC GAA

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTC AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAAAAAGA      240
GGTAAATCT ATAAGCCATC TTCAAGATTT GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTGTG ATAGAAACCA AAAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAATCTTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTGTGTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTCCGGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAATCTCG AG                                     562

```

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTCTT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCCT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAGTGCT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACTTCA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

```

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC 240
 AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC 300
 AGAAGAAGAA GCCGGATGGG TTCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAAGTGC AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA 60
 TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTAGC 120
 AGACAGAATC AATAGAGTTG ATGAGTGA CTGCTGGATGT GTGGGGAGTT TATATCACTC 180
 CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG 240
 AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG 300
 CTGGGCATGG GATGCACAAA TGGAAATTCC ACTGGGTCTG CAGCTCACAC ATAGGCATGA 360
 CCAGCATAGA GATAGAGAGG CCCAGTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG 420
 CATCAGCTGA GAAGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA 480
 TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG 529

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA 60
 TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAAATAGC 120
 ATCTAAGATT ACAAAGAAC TTAAACTGG GGGAAAAAAT GTTCTGGAA AGCCCAAAAC 180
 TGTAACAAAA TCCAAAACAG AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG 240
 ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTACT 300
 AAATGGAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTCA GGTGCCAGAC CCAAGGTACT 360
 CACAGGAAAC TTAAATGTGC AAGCCAAAGC AAAGCCTTG AAGAAAGCTA CAGGGAAGGA 420
 TTCACCATGC CTCAGCATCG CAGAACCCT CGAG 454

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCGGCC	TTCATGGCCT	AGGTCTCTCAA	GCATTGCTTC	AATATCAATA	TCGTCTGCCA	60
TTTCTCTTAA	ACGCCTGTTC	CGGCCTTCGG	GCGCCTGTGG	TGCTCGTGTT	CGGGAAGAGA	120
TTGCTGCTGC	TGCTGCTGCT	GCTGCCGCGC	CCGCCGCTTC	TGTTGCTACT	GTAAAGCCCC	180
TAGGCCCAGG	CCGCCGAACC	CCCCAGCCCG	AATATCGGGT	TCCAAGGACG	GCTAGGCCCG	240
AGAGAATCTA	AAAAAAACAA	TGGAATTAGA	GAAGCCACG	CGGGAGAGCA	GGACGGCGGC	300
TTCCGCAGCT	CAGGATCCAC	CCNCGCACA	GCGTCGACAA	GTCCCTGAA	ATGGCGGCCG	360
CTGCTTCCT	GTACTCANAN	TCCACCCCC	GAATTCTAGA	CCTGCCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCGGCC	TTCATGGCCT	AATTAAGCCT	GCCTACTTCT	ACAATGCATT	CTGTTACCTA	60
TTTGAACAGT	ATGTTTGTA	CTATGGCAAT	GAAGTCAGTA	GATAGGAAAC	CAGTTATTCC	120
TTCTACCTTT	AAAAATTTG	AGAACTTGCC	AACCAGGGAC	TAAAGCTATT	ATCTTGAACA	180
GAGTCCCTAA	AGCTAGTCTA	GTTTGTGCCA	CATCTGCAAT	GATTATTGTT	TAATTTCAAA	240
AGAATCCTCA	GGCTCTACAA	TCTAGGGGTG	GTAAATGTGT	TTCCACTATA	CTTGGGACCG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCGGCC	TTCATGGCCT	AGGAATCTCC	TCTTAAACCA	GGTGAAGTGG	GAAAGCAGGG	60
ACCATAACCAC	CCTGAGTGAC	ATCTACCTGA	ATAATATCAT	TCCTCGATTT	GTACAAGTCA	120
GCGAGGACTC	AGGAAGACTC	TTTAAAAAGA	GTAAAGAAGT	CGGCCAGCAG	CTCCAAGATG	180
ATTTGATGAA	GGTCCTGAAC	GAGCTCTACT	CGTTCATGAA	GACATATCAC	ATGTACAATG	240
CCGACAGCAT	CAGTGCTCAG	AGCAAACTAA	AGGAGGCCGA	GAAGCAGGAG	GAGAAGCAAA	300
TTGGTAAATC	GGTAAAGCAG	GAGGACCGGC	AGACCCCATG	CTCCCCTGAC	TCCACGGCCA	360
ACGTTCCGAT	TGAGGAGAAA	CATGTCCGGA	GGAGCTCAGT	GAAGAAGATT	GAGAAGATGA	420
AGGAGAAGCA	CCAAGCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCGGCT	TCATGGCCTA	CAACATGTCA	GTTTTTTTTT	TCATTTTCCT	CAATATTTTT	60
CTTCTNGCTT	TCTCTTCTCC	TGGTTCCTCAG	CCTCTACTCA	ATAGTCCCCC	CAGCTTTGTG	120
TGCTGGTCTC	GGGGCTTCAT	GGAGATGAAT	GGGCGGGGGG	AGTTGGTGGA	GTCACCAAG	180
AGATTCTGTG	CTTCCACGAG	GCTTCCCCCC	ACTCCTCTGC	TGCTATTCCC	TGAGGAAGAG	240
GCCACCAATG	GCCGGGAGGG	GCTCCTGCGC	TTCAGTTCCT	GGCCATTTTC	TATCCAAGAT	300
GTGGTACAAC	CTCTTACCCT	GCAAGTTCAG	AGACCCCTGG	TCTCTGTGAC	GGTGTCAAGT	360
GCCTCCTGGG	TCTCAGAACT	GCTGTGGTCA	CTTTTCGTCC	CTTTCACGGT	GTATCAAGTA	420
AGGTGGCTTC	GTCCTGTTC	TCGCCAACTA	GGGGAAGCGA	ATGAGGAGTT	TGCACCTCCG	480
GTACAACAGC	TGGTGGCCAA	GGAATTGGGC	CAGACAGGGA	CACGGCTCAC	TCCAGCTGAC	540
AAAGCAGAGC	ACATGAAGCG	ACAAAGACAC	CCCACACATC	TCGAG		585

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGTCTGGTAG	TAAGGTGGAG	TGGGTTTGGG	GCTAGGTTTA	60
GCTCGGGGGA	GGTGGTGTG	GGGGCCGCG	GCTGCGCGGT	GCCTGGGTAC	ATCTCCAGGC	120
CCACGCCCCG	GGCTTGGGAA	GTCACATCCA	TGTCTCTGCG	CCGTGCAGCT	TTCAAGATTT	180
GCCGAAAGGC	TCCCAGAGCT	CTGTTTAA	TGGTGAATCC	ATCTTTAGAA	AGAAGCGTGA	240
TTCTCCTTGA	AGTGAGCCTG	GCATTTGTCA	GACAGGAAAC	TCCCAGGAG	GAGCACCTGT	300
GGTGGTTTGG	GTTGGGTTTG	TTAACTGCAG	AGAGTGGGAA	GAACAGATGC	TCCTCACACC	360
GTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AGGAAAGACC	ATCAGCCTGG	GAGTCAGTGA	ACCTGACTCT	60
GATCCCAGCT	CTGCCTCCAN	TCAGCTGTGT	GATGACAGGT	AGGTCACCTT	CCCTCTCTGA	120
GCCACAGTTT	ATCTGTCTGT	AAACAGGGGT	ATTGGACTGG	ATTCTCTGTT	ATCTCTCATG	180
TCTCTGTGAA	AGGTCTGTGT	TTTCAAATAC	TCCTTAGGGA	CATGACCTCA	CATAGAAAGA	240
GGGGGTGCCA	CGAACTGGAT	TCCCAGCACT	CCCCCTTCCC	AGCTCTGCTC	AAGCTGAGGG	300
ACCTTGAAC	ATGGTACTTG	GACCTAAGTA	CTCTCTCTGG	GCTTCAGTGT	CCCCAGCTAT	360
AAAATGGGGG	AAATGCCTAA	CTCAGGAGGT	TGAGGTAAGG	ACAAAAGGAA	TTAATACATG	420
GAAAGTGCTT	GGAACAGTGC	CTGGCACAGT	CTGCTTTCAG	AAAAAGCTGC	AAGGTGGCTA	480
CTCTCAGCAG	ATATAAGTTA	ATGCAGGAAC	AGCAACTAGC	AGCTCTTGGA	CATGCAATAT	540
ATTATATATT	TTTTGCATCT	TTTACCCTTC	ACGGCACTGA	GCCTCACAA	CCGTTGACCT	600
CGAG						604

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GCGCAGCCAG	CGCCTGCCTC	CGACTCGACT	CCACACCTGC	TTGCTACAGC	GGGTGAGGAA	60
GCAGGAAAGG	GGGAGGGAGG	GATGTCGTCT	GGATTCCTGT	AATAATTTGT	TTCATTGTTT	120
CCAATCGACT	TAGTCACCAG	GTAAATAGT	AGCATAGACC	TTTCAAAAAA	GTAGCTAGCT	180
TATAAGTAGA	TGTATTGAAA	ACACCTGCTT	GTTGAGTCGT	AGACAATTCC	TCATTACTG	240
TGTGAACTCT	AGGGGGTGAA	ACACGGGCGG	AGAGCGGCTG	TGAGCTCACG	CGGCTCCATC	300
CCCACAGCGG	CCCAGGGTCA	CTCGGGGCCA	TTAATCAGGC	CGCAGAGCTG	CCCTCTGAGC	360
CGGGCCGCCA	GCGCCACAG	GGCCAGACC	AGGGCTCCCT	GGGCGGGATG	TTTTAAATCG	420
CACAGGGACA	AAGGAAAGGA	AAGACGCTGG	GGCCCAAGCC	CGAGCTTATG	AAACGTTATC	480
AAGGAGCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCT	TCATGGCCTA	GACTTCCAAG	GACATGCTTC	GAAGTCTGGC	CCAAGCCAAG	60
AAGGAATGCT	GGGATCGGTT	CCTCCAGGAG	AAGTTAGCTT	CAGAGTTCTT	TGTGGATGGA	120
CTTGATTCTG	ATGAGAGGTG	ACTACAATTG	CAAAGTAGAA	TTTGCTTTGA	CACCTGATGC	180
CAGGACAATA	GTATGTTACC	ATCCTTCTAT	AGACATTCCA	TATGAACGCA	CAAAACCTAT	240
CCCTTGACCA	GATCCTGTGT	ATAATAATGA	AGAAACACAT	GGTCAAGTGC	TGAAACTATG	300
AGAAGAAAAA	AGTGAACACC	TGGAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCGG	CCTCCCGAGT	AGCTGGGACC	ACAGACGCCC	60
ACCACCATGC	CCGGCTAAAT	TTTTGTATTT	TTAGTAGAGA	CGGGTTTCAC	CGTGTTAGCC	120
AGGATGGTCT	CGTTCTCCCG	ACCTCGTGAT	CCGCCCCGCT	CGGCCTCCCA	AAGTGCTGGG	180
ATTACAGGCG	TGAGCCAAT	CGCCCCGCCA	GGAATCCCTC	CTCTGTCTGA	CCTAACTGCC	240
CTCTGCCCTG	GAGCTGCTCA	GCCTCTATCA	ATTTTTCTGG	CTCTCAGCGA	ACGTTTTTCAT	300
TCAGTTGCAA	GACACAGAAA	CTCAAATTCA	AACCTGCTTA	CACAAAATAG	TGAATGTACT	360
GGCTCATGCA	CTTTTAAAG	AGATGAGGTC	TGTTGTGCTG	CCCAGGCTGG	ATGTGAACTC	420
CCGGGCCCAA	GAAATTCTCC	TGCCTCAGTC	TCCTGAGTAG	CTGGGACCAC	AGGAGCATGA	480
CTGTAAGTCC	TGGTGTGAAT	CAGGCTCCAG	AAACAGCTTG	ATCCTGGTTC	CCAACAGTAT	540
GGTCAAAACT	CATTCTCTCT	TCTGTCTTCT	TCTCTATGAC	AGGTGCTCCC	TAAGAAGTGA	600
CAAAGAAGGC	CACTAACAGC	TCTGGGCTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:608:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 531 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCACTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTGCTGATT CTGAAGTGGG TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G      531

```

(2) INFORMATION FOR SEQ ID NO:609:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTTAAATAGC      300
CAAAATGTGGC TAGTGGCTGT TGTACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:610:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTCAAG TTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG      345

```

(2) INFORMATION FOR SEQ ID NO:611:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 633 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCCAAGCA GAAGGAGGAG GCCCGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAGA GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCGCTGC CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCCATG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCACTC GAG                                     633

```

(2) INFORMATION FOR SEQ ID NO:612:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTCATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAA      60
GATTGACGTG CTAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAAGAAA AAAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CACACTGTTA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:613:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTAATATGAA ATGACAGCTC CACTTCCTAA TAGTGCATCC      60
GTGTCTTCCT CACTGAATCA TGTTCCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAAGTGGGCT    60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAACACCCC    120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG    180
GGCCTGCCCA GATCTTGGGA ATGTGGGCAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG    240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG    60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA    120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG    180
ATTCTGGCTG TGAAGACACC CAAGATTCTT TGAATTGTG ATGCTTTATT TAATTTAGAG    240
ATTATCTTCT CTGTCCCACT CTTCCTCTC CTAATAAGGA CTAGATGCTT GCTGCTTAAT    300
TAGTAAAGCA AATTAAAGAT AATTTCTGCT TTTGAGATT AGGGATAGAT TTTTAAACAT    360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAAACT TGAACCTTTA    420
TTTGACAGA CTGAGAATTA TGAAGTGAAG AAAGTTAGAG GATCAGAAAA AATAAATTTA    480
TAAATCACA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCCATGA    60
CTGCCCTTTC CCCTCACACC CCGGGGTTG CTCCAATGGT TATGTCAGT TGCTTGGCAA    120
AAGGGACTTT GTAGATGTCA TAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT    180
GGATTATCCA AGGGGCCAG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG    240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCCTCC    300
AGCATGGAGC TCGGGAGAG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA    360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC    420

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```

ATTCTCGGTA ATTTGCTATA TAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA    480
TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC    540
TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG                               577

```

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

```

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT    60
ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTTT TCCGTATAAA    120
AATACTGGGA AAAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG    180
GATCATTTGG AAAAAGTGAG TACTGTGGAT ATTTAAATAA TCACAGTAAC AAGATCATGC    240
TTGTTCTTAC AGTATTGCGG GCCCTCGAG                               269

```

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

```

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA    60
ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAACG ACGAGGAAGA    120
TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC    180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC    240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT    300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG    360
AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA    420
GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAGGAT GGACTCGAG                               469

```

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

```

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACCTC AACTGGGACA    60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT    120
TTGTGTTTAA GAACTTGGTT AACTGGAGT CAGTTGCAGA CCAGAATGGA GAAAGCACT    180
CCTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA    240

```

```

TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTTGG GTGTTAGAAG AAGATTCGAG      300
CTTATTTGGG CACTGGTCTC TATCTTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTTA      360
GATGCTTAGC TAATTCCTCT TAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTCATA      420
GCTGTAATCC CAGCAGTGTG GTCTCGAG                                         448

```

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

```

GAATTCGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTTGTCAGC      60
TGAACAGAAC CACATTAAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA      120
GGTAATTTTA AAGCCAAAAA TGTGGATAA GAAAAACCT ACACCTATAA TACCAGAGAA      180
AACTGTGAGA GTAGTGATTA ATTTAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC      240
ACATGCATCG CTTCAAGAGC TTGCCCTAT TATATGTAGC AAATGTGAGT TTGATCCGTT      300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTTGACTTGA CAAAATCTCT      360
TAATGACCTG GGACTAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAAT      420
ATCACAAAC CTAGATATTA TGAAGGAGGC CCTCGAG                                         457

```

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

```

GAATTCGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAAT GGCTATTATT      60
AGTTTGGATT AATTAGACTT AAGAAAACAA CTAAGTGGAG GTTTTTTTTG TTGTTTTTTT      120
GAGGGTTTTC TTGTCATGAG AATTGTATGT AACCAGTGAT ATGATTATTC CTGAATGTAC      180
AGACAGAAGT AAGCCTGGAC ATTGTTAAAT AGTCCCTGCT TTAAGGGACT ACGATAATGT      240
GTACTATGAC AAACGTGCTT TATCTTCTA ACGCAGTAAG TCTCGAG                                         287

```

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

```

GAATTCGGCC TTCATGGCCT AGTAGGTGTA TCACAGATT TTAATGTAGA ATGGTCAGTC      60
CAGGAGTAAT TGTAATTGTG GAAAAATGGA GAATTATAAA ACAAGAATGA TGTGCAAAAA      120
AGGACACAGT TGAATTCATC TGTGTTCTC TAACTATT CATTACTCA TTCATCCAAG      180

```

```

TTTTGAAAAA TGTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG   240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG   300
ACCTACAGTG CTGTGGAAGA TTCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA   60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAA AATGTTCCGT CTCTAGTTT   120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTAA   180
AGCTTTTGGG GAATAGGTTG CAATACATTT CTTGTCTACT GTTCTCTTAA GTGTTTCTTA   240
ATTCTAACC ACCGTGTTTG GAATTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC   300
TCCATGCACC TTCACATTC CTTACAGTT TTCGTGCTGT TTTCTTGTG TGCTACATTC   360
TGCACAGGAC TCGAG                                     375

```

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC   60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AAACCTGCCC   120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG   180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT   240
ACCACATTAT CCTGGACTGC TAGCTACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG   300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCT   360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT   420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCTATCA GCTTCCACCA AAATTACTAC   480
CTTCCAAATG TGACTTTTCT TCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAATGTT   540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAAAT CCCAGCTCC ACAAGACANC   600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC   660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC   720
CTCAGCTCCA CCAGAGACCA CAGTGCCCC ACCCATCTTC GAG                                     763

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCTT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTCGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTTG	TAGCACATGC	300
TTTCATTGTG	AGAGTTCGTC	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TCCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGC	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCCT	GTAATAATAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCTT	CTGAACACTT	120
TTCCGAAACA	AATTACCCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTTGGATCTG	180
TAAATATAC	CTTTTAGTAT	GGCACCTGTT	AAAATGCAA	GCAAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTG	AATCATTGAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTAGTGA	TTTTCGACAA	TTCAAAAAA	TATTTCTGAC	120
CGCTTGATTC	AGTTCCTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCTCTG	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTCTTCTAT	TTCCCCCCTT	TCCTTCCCTT	TTCTTTCTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCAACAG	ATTTCTGAGC	TACAGAACTG	420
AAGATAATTC	ATTTATTTC	AGCCACTGAG	TTTGTGGTAA	ATTTGTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCCTCA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGTTCCTACT GCCCCCGGGC GGCCTGCACA      60
GAGCTGCTGC CCTCCAGAGA CTGTGAATCC CAAGCCTGAC TCAGTGGACT GCTTCCTGTT      120
CCCCCTCCCTC CTCTTCCTCA CCTTGTCTG CACCCTCAAG CCTTTCTCCA ATGCCTCCCA      180
GGAGGATTG GGGACTTTCT CCCTGGGGCG CCCAGATCCA GCTCGGAGGC CTCACTGGGA      240
CCTGGCAAGG CCTGACCTCC CGCCCAAACT TGCTTCTGTA GCCCCCTAC TCGAG          295

```

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```

GAATTCGGCC TTCATGGCCT AACCTGTTGC TTCCCTGGG ACTGAAGGCA GAAGTGACTC      60
CCGAAATTCT CTTTCTGGAC TCAGAAGGAA ACCAAAGCAA TTGATGACAC CGCATCCCAT      120
ACTAAAAGCT ATGGAAGAGA GAGCAATTCA ACGAGCTGAA TGTAGGCGGA TCTTGGCAGA      180
GAAGNAGAAA AAACAAGAAG AAGANAAATT GGCCCAAGTA AAGGCCCAAG AGGAGGAACG      240
TCAGAAAAGG GAGGCAGAAG AAAAGGAGGC ACAGCTTGAA AGAAAACGAG AAGAGAAGAG      300
ACTGAAGAAA ATGAAAGAAC TTGAGAAGCA GAAGAGAACT CGAG          344

```

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```

GAATTCGGCC TTCATGGCCT AGTTCTTCCT TAGGAACAAG GGCAGGACCT CAAACAGTCC      60
AGAGGAGAAG CCTGGGGTGG TCAGGGAAGG CTTCTGGCT GAGAGGACAG GCTTAGGGGC      120
ACCTTGAAAG TTCAGGCTGA CTGGGGCTAG GGGCATGTGG GTAACAGGTT AAAGGGGGGG      180
GGGCTGGAAG ATGCAGACAC CAAAGACCTT TCAATATGAG GCCAAGAAAG GAAGGTTTCAG      240
AACAGGGATC ACTCGAG          257

```

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GTTCCAAATC	CATGGGAACC	AGCACAGGAG	CTACAGCAAA	TCATGGCACT	TCTGCAGTAG	60
CAATTACTAG	CCATGATTAC	CTAGGACAAG	AAACTTTGAC	AGAAATCCAA	ACCTCACCAG	120
AAACATCAAT	GAGAGAGGTG	AAAGCGGACG	GAGCTAGCAC	CCCCAGGTTA	AGAGAACAGG	180
ACTGTGGTGA	ACCTGCCTCG	CCAGCAGCAT	CCATCTCCAG	ACTCTCTGGG	GAACAGGTCTG	240
ACGGGAAGGG	CCAGGCAGGC	AGTGTATCTG	AAAGTGC GCG	GAGTGAAGGA	AGGATTAGTC	300
CAAAGAGTGA	TATTACTGAG	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAAAAATGG	AAGAATTGT	TTGTAAGGTA	TGGGAAGGTC	GGTGGCGAGT	GATCCCTCAT	60
GATGTACTAC	CAGACTGGCT	CAAGGATAAT	GACTTCCTCT	TGCATGGACA	CCGGCCTCCT	120
ATGCCTTCTT	TCCGGGCTTG	TTTAAAGAGC	ATTTTCAGAA	TACACACAGA	AACAGGCAAC	180
ATTTGACAC	ATCTCTAGG	TTGTGTATTC	TTCTGTGCC	TGGGGATCTT	TTATATGTTT	240
CGCCCAAATA	TCTCCTTGT	GGCCCTCTG	CAAGAGAAGG	TGGTCTTTGG	ATTATTTTTC	300
TTAGGAGCCA	TTCTCTGCCT	TTCTTTTCA	TGGCTCTTCC	ACACAGTCTA	CTGCCACTCA	360
GAGGGGTCT	CTCGGCTCTT	CTCTAACTG	GATTACTCTG	GTATTGCTCT	TCTGATTATG	420
GGAAGTTTG	TTCTTGGCT	TTATTATCT	TTCTACTGTA	ATCCACAACC	TATTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTATGGCCT	AGCGGGATCG	TATCACTACG	CACGTGGCGT	CAATGACAAA	60
GACGCCTTCC	CCACGGGACA	GGCCCTGGGA	ACTGCGGGGC	AAGGTGTGGG	CACGGCGGGT	120
CGCCTTCCAA	CCCTCCAGGG	TCTCCGTCC	TGCCCCCTCT	CCAAGACCCA	GAGATTCTCT	180
CCATCCGGTG	CCTCCGGGAG	CCCAGGGTCT	GGGGAGTGTC	TGGCTATGGC	GGGGCGGCTG	240
CTTTTAGGG	GAGGGAATCC	AGCATTGGG	AAACCAGATC	TGTTCTCCTT	CTTCCCTTC	300
CCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGA ATTATAAAAT GTTTCAGAT    60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG    120
TTGAATGAAT TGTGTTCAAT CTTTGAAACC CATTGATTG CAAAACCAAT ATTCCACTGT    180
CTATAGGAGG CAATTCAGAC TGAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAATAA    240
TAGTTCTAGA GATAAATAGG TCATTGAAG ACTAACCTCT GCCATTAGGG GTTCTTAAAG    300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTCAAT AACTCCTTGC ATATAGAATT    360
GTAAGTATA CCAGCCAGGT ACGGTGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCC    420
AAGCGGGCA GATCACCTAA GGTGCGGAGT CTCTCGAG    458

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT    60
TACCCTTCTT TCAACGAGCA TACCACCGGC CCTCCCAGCA CCTATGGCCC AAGCCAGTTG    120
TTTGCAAATT TTATACTGTG ACACAGGACA ATTTACACAC ACATACACAG TTTCACTTGT    180
GACATACTTT TTTTGTGAGA TGGAGTCTCA CTTCAATTGCC CAGGCTGGAG TGCAGTGGTG    240
TGATCACACC TTATTGCAGC CTCAACTCC TGGGCTCAAG TGGTCTTCTT GCCTCAGCCC    300
CCCTAGTAGC CAGGATTACA GCGTGCACC ACCATTCTC GAG    343

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC    60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT    120
TTTGTCAATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGCTCAT CCAGTCAAAC    180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG    240
GGACAGCAGA AACAGAAGT GGCACCACTT CAGTACAACA TCGTGGAGCA AAACAAGCTG    300
AACAAAGATT ATCGAGCAAA TGACACAGTT CCTCCAATA TCCCATACAA CCAATCATAC    360
GACCAGAAAC CAGGAGGATC CTACAACAGC ACAGAGCTCG AG    402

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAGCGGC	TGGAGATAGA	GAAGAGCTTA	CTGGTGGGAG	CGTCCGTCGA	60
CCCCGTGCCC	GCTGACCTAG	AGATGGCAGC	CGGTCTCACC	GACATATTTC	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACTCG	TTGTGAACT	GAAGAAGTTT	AAGAGAGTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTCGAGAAAA	TGGGGATAAT	GGAGAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACAATGATTT	ATCTTTTCGG	GGTTCAGAGG	CAGCTTGTTA	ATTGGAATTA	120
TTTTCTTTAT	TTTGGCCAC	AAGTGTGTTG	TTGTCTTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAGGT	GTGGCTTGTG	CTGCAGATTT	GTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGGAAT	GGTAGAGCTT	GCACACCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCTCT	CTTCCTCATT	TCAGATTCTT	360
CCTTCCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCTCT	TGGCTGTAAC	TTGTCAAATA	420
AAGTCCCTGC	AAAGTGATA	AGATTTTCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGCAGCAG	AGGTGGGTTC	TGCCTTAAAG	GCAGAGACCC	CCAACAACCTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTTG	GTTGCGAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAGA	AGCAGAAGAA	GAACTCCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGAGTTG	360
GCTTTGAAGA	AGCCCATGGC	GAAATGTGCC	TGGAAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCGGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTT      240
TGTGAATTCG GATTCTTTAT ATTCAAGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTG TCAATAGTTT TTGTAAGTCA CACACAAATA CTGGATTAA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCCA      300
TCGAG      305

```

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

GCGATTGAAT TCTAGACCTG CACCCAGCCA ACACTGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTA CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT      180
CCATCCAAC TATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TAGTCTCGA      300
G                                          301

```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTC ATGAACATGA CCTGTTTTCG TGCCTAGAC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAGGAG GGTTCCTAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTTC      240
CTGCATCCCT TGGCTGTGAT GCCCTCTCC CGATTTCCTA GGGGCTCTGG GAGGGACCCT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG      408

```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTGTGGT TTATTATCCC TGATGCATGT      120
GGCCCCCACC TGCTGTGTCC TTCTCTGTGT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGTA GAGCAGGTAA TCGAAAAAGG TTGCTTTGCT      360
CGAG                                          364

```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTTCCTAT CAATCTGTCT    60
GCTGATGTGG CACTACTGCA CCATTACCA CAACATTAGA ATATGTCTGA GTAACCTGGT    120
GGCTTAGATT TTTTGCAATG AGTCCCACCC CATTTCCTAG AACTTTCATG GCTATTCTTA    180
TATGTTTGTG TTCCGTAAGA TCTTAGGAT CAATTGTCT AGTTCTAAAG AGGAAATCT    240
GATATTATTG ATTTAGTAAC TTTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA    300
TTAATTACAG GTAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC    60
TCACATGTTA ACACCACTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC    120
CTTTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA    180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG    240
ATCTGCGGGT GGAGGCGAGG TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGGTAAA GCATACCCAA CCTTCAGTTA GAATATCTCC    60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATTCTTT TGTGTCTAGT AGATAACTTG    120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAAATT AACTCCTCAT CCTATCCTAC    180
ATGATTTTCT TTTTCTCTC CCCCTTCTC TTTTATTCCA TGCTACTGGG AATGGCAGGT    240
CTTGACCAA GTAATGGCAG GTCTTGACC AAGCAAGCCA GAAACCTGAG CTTAGTCTT    300
TATTCCTCCC CACTTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 559 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC    60
TAAAGGGTGA GGGTGAAGG ATGGGGCTGT GCCCTCTTAG GGCAGGAAA AACAGCTTGG    120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC    180

```


AGTCTGGCCT	CCAGCCTCCC	TGGCCCTTT	CTAGAGGCCT	CCATCCCCT	GGCGGCTTGC	240
TCCTGCCACC	GGGCCTCTGC	ACAGTCACCT	CCTGCAGCCT	GGGGTGTGTC	GCCTCTCCAC	300
GTCTTGATAT	TTTTGCTGGA	ATGCAGACGA	TACTATATTT	ACCGTATAAT	ATATTATCAG	360
CTCTCCTATA	TCTCAGTCAA	TTACATAGT	TTAAAATAGA	ACATCTTATT	AAAAACATCT	420
AGATATACAC	AGATTAGGAA	ACGCTTACAA	CATACAAATA	CACAACTAG	AAATAAATCT	480
TTAGCATACT	GGTATATACA	ACAGTGTGAT	ACAATAAATA	ATTCATTCA	TGCTCTATCT	540
ACACATCATA	TTGCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GAATTCGGCC	TTCATGGCCT	AGGGAGACTG	AGGCAGGCAG	ATCACCTGGG	GTCGGGAGTT	60
CGAGACCAGC	CTGACCAGCA	GGGAGAAACC	CCGTCTCTAC	TAAGAATAGA	AAATTAGGTG	120
TGGCGGTGCA	TGCCTGTGGT	CCCAGTACT	CGGGAGGCTG	AGGTAGGAGA	ATCGCTTGAA	180
CCCGGGAGGC	GGAGGTCATG	GTGGGCCGGG	ATTGCACCAT	TGCACTCCAG	CCTGGGCAAC	240
AAGAGTGAAA	CTCCATCTCA	AAAAAATAAA	AGCCTAGCCT	CCCAAAGTGC	CAGGATTACA	300
GGCATGAGCC	ACCGCGCCTG	TCTGTCCGCC	CGTCTTCTTT	TTTAAGAGCA	AGAAAAGGTT	360
TCCCAGAAGT	ACTCTGGTAG	ATTCTTATCA	CACACACATT	CCTAAACCAG	TACTGGCAA	420
AGAAAATAGA	ATTATCATGA	TTAATTAGCA	TATTCTGAAG	NACATGCTTC	CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GTGTGAACCT	ACGGGAAGGC	GGCCGCCTGC	ACCTCTGTGC	GGAGACCAAG	GATGATGCCC	60
TAGCATGGAA	GACAGCACTG	CTGGAGGCAA	ACTCCACCCC	GGTGCGCGTC	TACAGCCCGT	120
ACCAAGACTA	CTACGAGGTG	GTGCCCCCA	ATGCACACGA	GGCCACGTAT	GTCCGCAGCT	180
ACTACGGACC	GGCCTACGCA	GGCCTGGCG	TGACGCACGT	GATAGTGGG	GAGGATCCCT	240
GCTACAGCGC	CGGCGCCCT	CTGGCCATGG	GCATGCTTGC	GGGAGCCGCC	ACTGGGGCGG	300
CGCTGGGCTC	GCTCATGTGG	TCGCCCTGCT	GGTTCTGAGC	CCTGGGACTC	GGAGCACTGA	360
CCCCTGCGCT	TGGATTGCTA	GACTCCTCTT	CCTCCTGGAC	CCCATCCTCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTCTG      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA      180
TGGCAACCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGA ATAAGTGAGG CTTTGATATC      300
TGAAAATGAA AACTCTAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAAGT GAGCCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACT AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCCTG TGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTA AGAAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA          116

```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTGAA GGGAAATCTC TGGGGCTTTG      120
GGGAATTTAG TGCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTAGTGT      180
TTGGTTAAGT TGTTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTTAA CTGAAAACAG GTGACACAGA GTCACCAATT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTACCAG GCCAGTGGG ATGACTATGT GCCCAAACTG TACGAGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTTCG GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

```

ATGGCTCCGA TTCGACTCTC AGACCAAGAG CATCTTCGAG CAAGAGAATA ACCATTCCAG      240
TTTCTACACA GGAGTGTACA TTCTGATTGG AGCCGGGGCC CTCATGATGC TGGTTGGTTT      300
CCTGGGCTGC TGTGGAGCTG TACAAGAGTC CCAGTGCATG CTGGGATTGT TCTTCGGGTT      360
CCTCTTGGTG ATATTGCCA TTGAGATAGC CGCCGCCGTC TGGGGCTATA CCCACAAGAG      420
TCGAGTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```

GAATTCGGCC TTCATGGCCT AAGAGTACAG AGATTTCCT TCATCTGTG CTAATGTTTA      60
ATTNAAAGTA TATTGACACT AGTAAAGACA CTTTATTTTA ATTTGAGGTA TAAATGTCTA      120
CCTAAAATAG ACTATTTCCT TTGAGTCATA CATTTTAAAT GTGGTATATA TTCTTATATT      180
TCAGAAAATG ATAACATCA TAGAAATCTA ATACTCATT AATTGATTAA TAATTATTTT      240
TTTCCTCAA TTTGGAAATA TCTTTTCCTA TGTAATGGTC ATGTCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```

GAATTCGGCC TTCATGGCCT AGTCAGAACT CTTTGTGTCC CTGTTTTTGT GTCCATTTC      60
TGTACCTTGG CACTTTAAGG CTTGTCTGTC AAAATAAAAC ATTGCATCAT CACTTGTGAA      120
GGCAGAGCTT GGGAGTTTGC ACTGCTAAGA TGAGGATAGG AAAGAAATTT ATGCCGAGG      180
GCCTTTGATG CTGCCCACTC ACCTGTCTGC ACAGCCAGGG CACGGCCAGC GGGAGTGGAG      240
AAGACGAGCG AGACCAAAAC CTGCCCCTGG GGAGGAGGGT GGCATAGCCA TTGATAAATC      300
GGGACTTGAA CTATCCCATC ACTCTAAAAA TATTTTTTAT CTGATTACAA AAGTAATAGA      360
TGGCCAGGCA TGATGGCTCA TGCCTGTAAT CCCAACACTC CTCGAG      406

```

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT AGTGGAAGT AAAACTCAGA GGAGGCATCA AACCCAGGCT      60
TGGGGGACAA AACTAAGTCT TGCCAGAGTC CTGAAGGATG AACACAGTT AACCAAGCAA      120
GGGATACTGG AGGGCATGGA GGCTCTCTGG CCTGGAGTGC AGAGCATGGA GTGCTCAAAG      180

```

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTC A GAATGTAAA GGGAGAGAAT AGGAGTGAGA      240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG      300
ATTTAAAGAA GGAGAGGGTT AATTTTGTCC AATAGAAAGA TCACATTGTG TGTAGTGTGG      360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CCAAAAGATG AGACGGGAAC AGCTGCAAAAT      420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:662:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 502 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA      60
GTGAAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG      120
TGGTCCCAGT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCG GGAGGCAGAG      180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCCAGCCTG GGCAACAGAG CGAGACTCCA      240
TCTCAAACAA ACAAAACAAAC AAACAAACAA ACAAAACAAC AGTTATTTT TTCTCACCAT      300
TCTAAGAAT GTTACATTG ATTCTTTTTC AAAATTGGT CAGTTTGTGAT AGTCTTATT      360
CTCCATACTT TCATTCCCCC TTTTATTTC TGTAATAAT TGAACTTAT ATTCCCTATA      420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT      480
TTGTGGTGCT GATTTTCTCG AG                                502

```

(2) INFORMATION FOR SEQ ID NO:663:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 485 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTGTGT TTTGCGAGT GAACAGGTTG      60
ACAGAACTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC      120
TTCTGGAAGT GAACAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG      180
GGAAAGCTGT GAGGGTAAGT GGCACCCCTA GCTTCTTATT TATAAATGTG TCACTCATGA      240
GACTGGAGAG GCCTGAGTTG GGTGTTTGT AAATTCTTTC ACTCAGTCTC CAGAAGAGAA      300
TTTAAAGCA GGCCTGTAAA AACTTCTTTT CAACTAGGAC ATTGGTTATC CAGTGTGGTC      360
TTGGGGCCCC AGCGGGCCCC TAAGTCCCTT TCCATGGGTT CAGAGGGTCA AAACGTGTGT      420
CATAATAATG ACATTATTG CTTTCACTC TCATTCTCTC AAGAGTGATC AGTGGGTAC      480
TCGAG                                485

```

(2) INFORMATION FOR SEQ ID NO:664:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTCTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCCCT	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAAGAAC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGAAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCTCATGG	ATGAAGAAGG	ACCAGCCAC	ATTTACCCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAAGACT	ATGAAGATAA	AATTTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAAACCTA	GCAGAACAA	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTCG	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTTATACAA	CTTGAAAGAC	CGTAAAACTT	TCTGGTTGCC	ACAAGCATAT	CTTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TTGCATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTAAGGAGC	TGCTTGTTTT	CCCCATTTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTTG	GTGTTTTGCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAACTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTTAATGTGT	420
TGGTTTATTC	AGGCCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAAGTAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAAC TTTGGTTATA TGGAAAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTAA CAAGAGGAAA ACGGAAGTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTG CTGCCTGAAG ATGCATTGGA GCCCTATGAG ATTAGTATGG      480
CTATTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                          524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTATG AAATGTGTAC CCTCATACTA ATATTTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTTCCATA ACCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTTGTGAC TTTTCTTCTT GATCTGTGCC      300
TTATCCCTAG GCGGGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTACCA TTCAATGATT ACCTTTTTC AGAAAGTAAG AATATATAA TTACATTTAA      540
TCTTGAAGCT CGAG                          554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTGTAA ACGTGTTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGA AGGCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAAATTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                          329

```

(2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```

GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCTGGA GCGGCCCGAT AACTTGCCTC   60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA   120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT   180
CTGGACGTAT GTTCCCATC AGCCGCGGGA TCCCAACAT GCTGCTGAGT GAAGAGGAAA   240
CTGAGAGTTG ATTGCACCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```

GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAAG CAATAAGTAC CAAGAAATAG   60
CAACAAAAAT TAGCTTGTA AAGTTGGTTT TGAGGGTAGA AATGGCTCTT GATGCCATGT   120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTTGCCA CTTATTCTTT   180
TTATTTTATT TTATATTTTA CTTTAAATTT TTTGAGATAG GGTTCACCC TGTCGCCCCAG   240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT   300
CAGCCTTTTC AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAACAAAA   360
TTTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAC AACACAGCA ACAGCAACAA   420
CACTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```

GTAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA   60
AGTGAGCTTG TAGTGGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG   120
AAACAAGAAA TTAAGATGC TTTTGAACCT TTTGATACAG ACAAGATGA AGCAATAGAT   180
TATCATGAAT TAAAGGTGCG AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA   240
CTGAAGATTC TTAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT   300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG   357

```

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GGTAGATACT	GGTTTTTCGT	ATCCTGCTTC	TCCTAAGGGC	AGCTCTTTT	AGCATACTCC	60
CATGCAGCAA	CAGAAATTTG	TATCTTTTTT	TTCTTTTTTG	AGATGGAGTC	TCGCTCTATC	120
ACTAGGCTGG	ACTGCAGTGG	CACAATCTCG	GCTCACTGCA	ACCTCTGCCT	CCTGGTTCAA	180
GCGATTCTCC	TGCCCTAGCC	TCCTGAGTAC	CTGGGACTAC	AGGTGCGCGC	CACCACACCC	240
AGCTAATTTT	TATATTTT	GTAGAGACGG	GGTTTACCA	TGTGGCCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GGATGGACAT	CAGCACTTTA	CGGCGCCAGC	TGAGACCCAC	AGGCCAGCTC	CGTGGAGGGC	60
TCAAGGGCTC	CAAGAGTGAG	GATTCGGAGC	TGCCCCCGCA	GACGGCCTCC	GAGGCTCCCA	120
GTGAGGGGTC	TAGGAGAAGC	TCATCCGACC	TCATCACCTT	CCCAGCCACC	ACTCCCCCAT	180
GTCCCAACAA	GAAGGAATGG	GAAGGGCCAG	CCACCTCGTA	CATGACATGC	AGCGCCTACC	240
AGAAGGTCCA	GGACTCGGAG	ATCAGCTTCC	CCGCGGGCGT	GGAGGTGCAG	GTGCTGGAGA	300
AGCAGGAGAG	CGGGTGTTGG	TATGTGAGGT	TTGGGGAGCT	GGAGGGCTGG	GCCCCCTCCC	360
ACTATTGTGT	GCTGGATGAG	AACGAGCAAC	CTGACCCCTC	TGGCAAAGAG	CTGGACACAG	420
TGCCCCCAAA	GGGCAGGCAG	AACGAAGGCA	AGTCAGACAT	CCAACCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	AAAGAGGCCT	AGTCGCTCTT	GCTGAAACCT	TCAATGCAGT	GAGCGCCCAT	60
CTCATTGGGA	CCTACAGGCT	GAAGTTCTTC	CTCTGATGGA	CATGACCCCC	GTGTTGTCTC	120
TAATAACCTC	ACTTTCACCT	TGTTCCAGCC	ACACGGGGTT	TCTGTCTTTC	TCGGGTCATG	180
TCGGGCTTAT	GTGCCTCGGG	CCCTTTGCTC	ATGCTGTTCT	CTGCCTGGGA	TGCCTTTTAC	240
TGGGTGCCAG	GATGGTCAGT	GATTCCATTT	CTCTCAGAGT	CTATTCACAG	GTCCCCCTTCT	300
CGGTCACGCC	TTCTCTGGCT	CCACTGTCTA	AAATTTCAAC	AGCTGCCTCT	GCCCCCGGAA	360
CTTCATATCC	CCCTTATCTG	CCTTTTTCCT	TTCAGCTCTT	ACTTCCATCA	AATACAGTAT	420
GTATTTTAA	AAGTCTTATC	TGTTTCACGG	TCATTTTCTT	CCACAGGTAA	TTTGGTTAAA	480
CTTTGTAAGA	TTGATGATGT	TTAATACTGT	TTTGTTTAAT	ACAGTACCCC	CAGTTTAGCA	540
CACAGCTTTT	GAATGAATGA	CCAGTTTTTA	TTCCCTCTG	AAGCGCTAAG	AGCTGCCGCT	600
GAGGTGGCAT	CTGTAGCNGC	TCCCGCTCCA	ACTCGAG			637

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CACGTCCAGC AAGGTCACCC GGGCCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTGCAGTG CTCAGCGTGG CGGAGGAGGC GGCCGACCGG      360
CACCCAGAAA GACGCATGCG GGCAGCCTTC ACAGCCTTTG AGGAAGCCCA GCTGCCCGCG      420
CTCAACAAG AGAACCCTCA CATGCGGCTG TCGCAGCTGA AACAGCTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAAACTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCCC GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTGAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGA      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTGCTG ATGTGATGAT      300
CTCAAAAAG GAGTTTGAC CCTCAGATGA AGAGCTAGAC TCTTACGTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTT TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCCAGTTC CCTTCCCTGC CCCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCACG      240
GATCCAGGAG AATATAGCAG GAGACCCTCA CCACCCACA CCATGCCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC TTCATGGCCT AGTTCTCACC GGGGAAAAAC CCACTGTTAG GATGGCATGA	60
ACATTTCCCTT AGATCGTGGT CAGCTCCGAG GAATGTGGCG TCCAGGCTCT TTGAGAGCCA	120
TGGGCTGCAC CCGGCCGTAG GCTAGTGTA CTGCATCCC ATTGCAGTGC CGTTTCTTGA	180
CTGTGTTGCT GTCTCTTA^A TTAACCGTGC TGAGGCTCCA CATAGCTCCT GGACCTGTGT	240
CTAGTACATA CTGAAGCGAT GGTGAGAGTG TGTAGAGTGA AGTTGCTGTG CCCACATTGT	300
TTGAACTCGC GTACCCCGTA GATACATTGT GCAACGTICT TCTGTTATTC CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA GGCCTAGTGC TTGAAATGCA GGGATCTGGC AGTCAGCAGA AGGATCTGAG	60
ACCCAGTGTC GAGGTTAAAA AAAAAACAAA AAACCAAAAA CCAATGCAGG AATCCAGTGG	120
GTGGAGTGAG GGGATCTGGG ATCCAGTGAT GGGGGCCCCA GGATCCAGGC ATTGTGGTTG	180
TCAGGATCCA GTGGTGAGGT TTGTTGACAT CCAGAATCCA GCAGCTGAGC TTGGAGATCC	240
AGGGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC AAAAATTGAG GCAGAAGATC AAAATCGGAG TGGTAGGCGG ATCGGACTTT	60
GAGAAAGTGC AGGAGCAACT GGGAAATGAT GAATATTCAA AGTCATCTGG GTGAGGCCCT	120
AATCCAAGAT TTAATCAACT ACTGTCTGAG CTACATTGCG AAAATTAAAC TCCCGAAGAA	180
GAGGGGTACT TTCATTGAAT TCCGAAATGG GATGTTAAAC GTGTCCCCTA TTGGAAGAAG	240
CTGCAGCCAA GAAGAACGCA TTGAGTTCTA CGAACTCGAT AAAAAAGAAA ATATAAGACA	300
AAAGTTTGTG GCAGATCTAC GGAAAGAGTT TGCTGGAAAA GGCCTCACGT TTTCCATAGG	360
AGGCCAGATC AGCTTTGATG TCTTTCCTGA TGGATGGAAA CTCGAG	406

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTTCCCTCCC TTTCCCCCAA    60
GACTCCCTCT GGGCCCAGCC AGCAGGTGAA GCCTGACTTA GGGGAAGGGG GATTTCCAGG    120
GGAGGGGGCCC TGGCCCCCAC TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCACA    180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTGGA TGGGCATGGT    240
CGTGCTGCTC ATGGGCCTCG TGTTGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC    300
GCAGCTGTCC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG    60
GATTACAGGT GTGAGCTAGC ACTCCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG    120
CAGGAATTGG TCCAGGAATT GGTTCTCAAG TTAGAAGGAA AATTGAGGGG GAAGAACTTG    180
TTTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAAACTCCTT GCTTATGTCT    240
TTGTATTGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTCACA    300
GACAAACACG TGTATGCACA TTTCACAATG GAGGAAGAAG GGATATGGTG TGCACGTAGG    360
TAAAGTGAGC AGGGATACAG AAGAGAACT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GTCCTAACCT TGGGTCCAAG TTTCGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG    60
CCAGTGCGTT GATAGATCGC CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA    120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG    180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCATCTCTC    240
AGACCAACTT GATCACCCTT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG    300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG    360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACCG GGAGACCACC GCCACTGAGT    420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAACT CAAGATGACC    480

```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GGCCTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTT CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTAA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTTTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAAGTACC ACTTGAAATA TTCCCGGGAA AGAAACATTA TGAACCAAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTTGTACTT GTTTTGCTCC AATTTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTTT CATGTTACAT CTTTITAGATT ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCCTC      180
CCACCTCTGC CACCCTAGGC TCGAG                                         205

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCCCTCGAG                                         100

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT    60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCCGCCAG GGTGTGGGGG ACCTTCACTC    120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTTGTTT CCTAATAATT TCAGCATATT    180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG    240
CTGGGGAGAA GGTGTTGGGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCCTCG    300
AG                                                                    302

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG    60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GCTCCTTTGT    120
CTGTTTCTCT TCCGACAAAC ATTGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA    180
ACACTGATGC AGACACTGCC TCCCATCCA ACGGCACTCA CAACAACTCG GTGCTCCAG    240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG    300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG    360
GGTTCTCGTC AACAAAGCGGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG    420
GCACTCCTGA AGCAGGCGTG GCAGCTACAC TGTCGCAGTC CGCTGCTGAG CCTCCACAC    480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG    540
TCTTTTCTGC CTCCGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG    600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCCTCG    660
AG                                                                    662

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```

GAATTCGGCC AAAGAGGCCT AAGCCCCCAA AACACGCTCT TTTGTGCCTC CCCTCAAATC    60
CTTCACAGTG TTCTTCCATA TCCACTCCTT CCAGGAAGCA TGTTCTCACT ACCCCAGTTC    120
ATGTGGGTTT CTTCCTCTC AGAATTTCTA TCATGCCCTT ATAAGTTTAG CAAATTGTCC    180
TTCTCTAATT GTTTCACATC TGTCCATCG ATATCCCAGG AGGACTGTCA GCTCTATGAA    240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAAAC    300
TACCCAGAAA TGTTTCTCGA G                                                                    321

```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCCTACTT GCTTTTCTT AGCATATAAA      60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA      120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA      180
TACAATACTT GCTGTCCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG      240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT      300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT      60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTTA TATTTATTT TGTGTGCTGGC      120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT      180
GCAGTCCCAG CCACCGGAA GACCGAAGCG GGAGGATCAC TCGAG       225

```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCGCT      60
GGCGGCCGCA GCCCTCGTAC TGATTTCAT CGTTGCATTT ACAACTGCTA CAAAAATGCC      120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTTAAAT GCCAAAGGCC AGAAAGAAAC      180
TTTACCCAGC ATGGGACTCA CCTACCAAAC AACTTTCTGT CGTTGTGCTT TCAACAATG      240
AAGAAAAACG GTTGCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA      300
AACGAGACCT CGAG       314

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGGTTGGTG	GTGGTGGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTTG	TGCTTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGGC	TGCTGATAAA	ACAAGACCCT	180
CGGAGCCAAG	AAACAACACT	GAGTTCCAGA	TTTCGGAAGG	TTACAGAGTG	TTGCCGACAC	240
GCCCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGCTG	TGCTCACATG	CCCCCTGTG	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTGC	AGCCCCCTCC	CAGGCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACTTCTTG	CCTCTCTCCC	60
CTTCCAGCAA	CATGTATAAT	CCTGTGAGTG	TTTCTTCAGC	ACCCTTCTCT	GTTGTTTACA	120
CTACTGCAAG	AGCCTCCCTA	AGTGGTCTGC	CTGTTTCCAC	CCTGTTGTCT	TGGAATTTAG	180
TTTTCTCGCA	AAAGCCAGAG	AATGTTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGAGGGG	AGATCCAGCT	TCCCAACAA	GACCAGCAGG	CCCCTGTGCG	GCCTGGCTCC	300
TGTTCAACCT	ACCAGTCTTG	GCTCAGGCTC	ACGGCTGGAA	TATGCCGAGC	TCTTTCTTGT	360
CCTGGGGCCT	TTGCACTTGG	CTTCCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAATCTCAA	60
AGAAAAAAGC	GAGGGAGAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTTGGGGAA	GCTCTGCAGA	GCCCAGCAAG	240
CGGAAAGCAG	AGTGTGGAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```

GAATTCGGCC TTCATGGCCT AAGCCAAGCA AGGCTGTACC TTAAATTACT GCTGCCCTCA      60
TTTGCATCTG GCTGCCCTCA TTATAGTGCT ATTAGCAGAG TGCAGGGGTC CTCCTGCTGG      120
CCCATCGGGA GTGGTGCGTG CACAGTTGTG GGGCCTTGCT TTGGTGGTCT TTGCTGCCTT      180
CTGGGCAAAA TGAAGGATTT GGAGTAGACA GCAAGCAGGC ATACATCCTG GGCCAGAAGC      240
AGCCTGCGGA GCTCATCGTG GCTTGCCTTA AATTGTTTCT CAACAATAAA GTTGTGAAA      300
AACAAATTGT GTTTTCTTTC TCCTTATTAA AAACCAAAA TTATATTCAT TATAGAAAAT      360
TAAAGAAGAT AGCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAGCCTCCC AAAGTGCTGG      60
GATTATAGGC GTGAGCCACC GCGCCAGCC GAAAATCTAA AGATATTGAA AAGATACAAA      120
GGAGCACATT ATGAACATTT TTTTCGTATC ACTGAGTATT TTATAACTGC ATCATTGATT      180
TTAAAGAAT TCATGACTTT GAAAACAAAT ATTCTACAAA GTAGCTTTTG ATTTAACATG      240
AGATTTTATA TATGTGCTTA TCTTGGTCT CTATGAAACC CCATTGAAAT AAGAAAATGT      300
AACACCAGC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC AAAGAGGCCT AATAGTCAAG ACCTTTGCAG TTTTGATCAC AGAAATATGA      60
AAGATTACAC AGCTACAGCT ATATGAATGA TAAAAGTGAC AGCTATGGAT TTTTAAAGTT      120
ATAAGTTGCT ATACTACATA TATGTAATGT GTGTGTGTAT AGTGTGTAGG TATATATATT      180
TATATTTATA CACACACTAT ACATGTATTT TAAAATATTG AAAATCCAGA ATTATTTTAT      240
GGTAAAAAAT ACTAAAATTG ACTTCACATG CTGAATGAAG AGAGCCTGAG TAGACCAACA      300
AACAAATGAA AAATTAAGAC GGTAGAAGA TACGCTTCT AAAAGAATAC ATTTAGAATC      360
TAACTTTAAA AAAAAAAAT CCTACTCTCC TGAGCCAGAG TGGTCTCAGA GAGACTCCGA      420
GAACCTAATT TTTTACAAGT AAAATCTTTG AAGAATTGGT AATTGCTAAA TTTTCCAAC      480
ATACTATTCT ACAAGACTAA CCTAAAAC TGATTATAAGAA CTAGGTGAGG AGGCGCGGCA      540
AAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCGGCC	AAAGAGGCCT	ATCGAGCCAC	TGCACCTGGC	CGATGTGTTC	TGTTTGAAAT	60
CTTACTCAAA	AGTATTTGAA	GAGTTGTGTA	TAGTTGTATG	GATATGTCGT	TAGTAAACAG	120
AAACAAATTG	CTTCAGTTTC	TCTTTACTTA	TTTTCTAGGT	TACAGTACCT	TTACCAGCAT	180
CCCAGCTTTC	CTTGCCTAAT	TTTGGATCTA	CAGGGCAACC	TCTAATTGCT	TTGCCTCAGA	240
CTCTTCAGCC	CCCATTCAG	CATACCACTC	CCCAAGCACA	GGCTCAGAGT	CTGAGTCGTC	300
CTGCACAAGT	AAGCCAGCCT	TTCAGAGGAT	TAATTCCTGC	TGGAACACAG	CATAGCATGA	360
TTGCAACCAC	CGGAAAAGTA	AGTAAAGAGA	CATTTGCACA	GGTTATTTGA	GAATTTAAGG	420
TAGTGTGTTC	AGATATATGC	ATCTGTGTTA	TCTAAAAAAC	TAAAATGCGT	CAGTTTTTAC	480
CACCTGCAA	AAATCTCAA	CCCCAGTATA	TTTACATTTT	ATCTATTTAC	TTTTAATGTG	540
TTTGCCCCA	TCTAGTTTTT	ACCTAATAAC	AAAGAATTCA	CAAAATTTAT	GGAAGAATTG	600
GATTTATAGT	GTCTCTTCGG	CTTATTTAAT	TATAAGTCTG	TTTGGTCAGG	TAATTCATA	660
ATACTTGAAG	CCTAACTATA	GGAGTTTTGT	ACTAAGGTTT	TTTGCCCTTT	CCTAGATTAC	720
GTCTTCACGT	ATAGGACATG	TAAACACAGC	AACTCGAG			758

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCGGCC	AAAGAGGCCT	AAGATGGCCT	TCCCATGTTA	TGGCTACATG	GCTGTGATAA	60
CAAGTAGAGT	TATGTGTCTG	CGCTCTAAAC	TCACTGAGTC	TTGCAGGATG	TAAACATCCT	120
AGCTCAGCCT	ATCCTTGACC	AAAGCACANT	CATGCTCCTT	ACAAACTCCA	ACCAGCCTGC	180
ACACTGGGAG	GAGCGCGTGC	TGGGCTAGAG	CCACAGAATT	TTGTACCGTT	GGCAGCAGGG	240
AGGAGCCTGG	CCCCTCCTTT	CCTAGGTAGA	ATCTGGAATT	CAATCTGTGA	GGTGGGAAGC	300
ATATACTAGG	AGGACTTTCA	CTCTGCTGAG	TCCCTGTTCC	CCCTCCCTTT	TTTTTCCTTT	360
TTGCCCAATA	AACCCCTTTA	TTCTCACACT	TCAAATTGTC	TGTGAGACTA	ATCTTTTGTG	420
GCCATGTGAC	ATGGACCCTG	TCTGTAGCTG	AACTAAGAA	AAAGCCCCTC	CCGCACAGTC	480
TGATGTTTCC	TCAGTCAGAC	ACTGCAAGCT	GTGATGTTGG	GGTGAGTACA	GGATATTGG	540
CAATATTTGC	AGACAGTTTT	GGCTGTCAGA	GAGGAAGATG	CTGTATGCAG	ACACACTTGA	600
CAGCAATAAC	TTAAGCCCAC	CCTGAGACTG	ACTCTGCATG	GTGATGCACC	TGAAGGCCTC	660
GAG						663

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCGGCC	TTCATGGCCT	AGAGCGATGT	CAAGTGATCT	GCCCGCCTCA	GCTCCCCAAA	60
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```

GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCATT TTTAATTTA      120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA      180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAAACAA CCTAAAAACC CAATCTGAGC      240
AGGTTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA AAAAAATAT      300
GTCGTAAAAA TAATCATGTA GAACTGGCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCTT CCTTCACTGT      60
GACGCTTGTC CTCACCTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTC ATCAGCCCCCT      120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC      180
AGTTTTGCTC CTTCTGCCTT GAAATTTGTT CCTCCAGAA ACTGTCCCTC ACAAGGCATG      240
ACAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGCTGCAGAA TGAGCTGTGG      300
AGTCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTCC CCTTAGAAA TGCCTAACAC      360
GCCCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG      60
AGGCAAATGA TGTGGGTTTG TCCCATGTGT TGTAATGGTA ACATTGGTTG CTTGGTTAAG      120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTCTCTGT AATTAATAAG      180
TAATTGTAT GATACTTTGA GATAACAAAG TAGACTGTTC ATCAAACCTT CATCAATGAA      240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCAT      300
TTACCATTTA ATACATTTC AAGAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC      360
TCGAG                                     365

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA      60

```

GAGCAAAGAG	CATGAGAAGC	TGATGGAGGG	AGAACTTGAA	GCTTTGCGGC	AGGAATTTAA	120
AAAGAAAGAC	AAGACGTTGA	AAGAGAATTC	CAGAAAGTTG	GAGGAAGAAA	ATGAGAATCT	180
CCGAGCAGAG	CTACAGTGTT	GTTCTACACA	ACTGGAATCC	TCTCTCAACA	AATACAACAC	240
CAGCCAGCAA	GTCATCCAAG	ACTTGAATAA	AGAGATAGCC	CTTCAGAAGG	AGTCCTTAAT	300
GAGCCTGCAG	GCCCAGCTGG	ACAAAGCTCT	GCAGAAGGAG	AAGCACTATC	TCCAGACTAC	360
CATCACCAAA	GAAGCCTATG	ATGCATTATC	CCGGAAGTCA	GCCGCTGCC	AGGATGACCT	420
GACACAAGCC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCTGCTCTAT	ATCTTAGAGA	AAATAAAGA	ACCACATGTT	GCTTCCCTGC	CTGCAAGCTC	60
TTCTGAATTC	ATCACCATTG	ATGTTCTTTC	CTTCAGGGGA	AATGAAGGCA	GATTGTTCTG	120
TTGGTGCTCA	CAGATCTCTT	TCTGTTCTGA	TACCCCTCTC	TTCTCTCTCT	GCTTCTTTCC	180
CTTCATCATG	TGCTCTATA	CAAGTCTCTC	CCAACTTTAA	AACAAAAACA	AACCCTTCCC	240
TAAATCTTGT	GTGTTGTTCA	GCCATTAGAC	TGTATCGTCC	TTGCCATCCA	CGTTATTGGA	300
AGAAGGCCAG	CTCACCTCTA	CTCCCTTTCT	GCCCTTTCCC	TCTTAATCTG	CTGTCCTCTG	360
ATTCTGCCC	CCACAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC	TTCATGGCCT	AGGGGCCTGA	AGATCTTCGG	GTATTTGGCT	CCCAGAATCT	60
GACCACAGTG	AAGCTAAAAG	GGGTGGGTGA	CAGCTTCAAG	AAGTATCCTG	ACTACGAGTC	120
CAAGGGCATC	AAGGCTCACT	TCAACCTGGA	TGAGAGTGCC	GTGCTCAGTC	TAGACAGGGT	180
GGAGTCTGTA	TTTGAGACAC	TGGTAGAGGA	CAGCGCAGAA	GAGGAATCTA	CTCTCACCAA	240
ACTTGGCAAC	ACCATTTCCT	GCCTGTTTGG	AGGCGGTACC	ACACCAGATG	CCAAGGAGAA	300
TGGTACTGAT	ACTGTCCAGG	AGGAAGAGGA	GAGCCCTGCA	GAGGGGAGCA	AGGACGAGCC	360
TGGGGAGCAG	GTGGAGCTCA	AGGAGGAAGC	TGAGGCCCCA	GTGGAGGATG	GCTCTCAGCC	420
CCCACCCCT	GAACCTAAGG	GAGATGCAAC	CCCTGAGGGA	GAAAAGGCCA	CAGAAAAAGA	480
AAATGGGGAA	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAACTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCAGT	CGCTGGATTA	GGCCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTTGG	ATTTTATAGT	GTAGTGGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAGAAAGTA	AGGTGAAGGT	AGAGGGGTTG	GAGCAGGAGG	AAGGTGTTAT	TTTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAAA	GATGGTAGGA	420
ACAAACACGG	CTTGTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCAGAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCAAAACC	ATTTTCACCT	TGTTTtaggt	ATTTATAATA	ACAGCACTCC	CACTTCTCAT	120
GATCAATTTC	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTTCATAA	CCTGAGTGGC	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTTCTGG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTCAGCCACC	GTACCTGCCT	GGGAATTTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAAATATAT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCCAGGA	AATAGAAAAT	540
ATATTACCTT	ATTTATACTG	TTTAAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTTAAAAAAA	TTAAAAAAA	AAAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTCAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTTGTA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATAC TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG                                     499

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(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTAAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTTTCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCTGCT GTTTTCACAT CTTCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTACCAC CAGTCACGTT TTAAGTCCTC      240
TGAAGTAAAT GTGAAGGTCA TTTCCGCTT AATGCTCCCC ACCTGTGAAA TGAACACAG      300
AAATTCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCTCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCACG CCAAGTCCG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCCGCGCC TCATGTACCG CGACCGCGAC GCGCGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGCGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

```

CTCCCGCATC CCCACGGCCT GGTTCGTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCCCTG CTCCTGTGGT CTTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCG GCTGCTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTGCG TCACTTTCCA 240
GATCAGCCAA CTGCAGAACAA TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGTATGG 60
CAAATTCCTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGCCT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120


```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT      180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACTGC ACACAAGTCC      240
CTGTCTCAGG CTCCATTTGG GGAAACCAAA CTAAGACACC ACCTCAAAAC ACAGAATTTC      300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT      360
ATATTAATCC TAGTTATTTA ACTCGAG      387

```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGATA GTTTGCAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTGATAG      60
TTTCTTTTGC CATGCACAAG CTTTGTGTT TAATTAGATC CCATTGTGCA ATTTTGTCTT      120
TTGTTGCAAT TGTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA      180
TGGTATTACC TAGGTTGCCT TCCAGAGTTT TTATAGTTT GGGTTTTTAT TTAATCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC      60
TCCCAGGTAC ACTTCTGTGAT CACCCTCGG ATACCTCATC CCTATCTATT CCTTTTATAA      120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCACTGCCA      180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTACGCG      240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGGAGCTC      300
CCTAGGCCAT GAAGGCCGAA TTC      323

```

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCGGGTC      60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA      120
TCCTTCTCCT CCCCCGCCCC TGATACCCCG CCCCCGGATC AGAAATATAT CTATATTCTC      180
GACTAAAGTC TCATCAGGAA ATATTTCCTG TCTTTTATTT TAAGCATCAA ATTGTTTATG      240
TTGATTAAA AAGGAAAAAA TACAGACGAC TCGAG      275

```

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAA      240
GTGTCAGTTC TGTTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCGCCAGG GTCATTGTCG TGGATTGCA      120
CAGTCGGCTG GCGGGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTTGAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGA CTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCAG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAAGT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT	60
TCCGATTTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT	120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG	154

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA	60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT ATGTCTGTGC CCGGAAAAAC	120
TCACAGAGCT ATAGCAGATC ACTTGTCTG GAGTGAGGAA ACAAAGAGTC GCTTCACGGA	180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCCTAC ATGATGAGAG	240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA	300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA	60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT	120
TGTATTTCTG CTTTTCTTT TTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC	180
CAGGTAAGTC AGCTTGTATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT	240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC	300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA	360
GAACCTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA	420
GTAGAGACTC GAG	433

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```

GAATTCGGCC TTCATGGCCT AACAGAAAC ACCAAGTACC TCGACCTCAA GAATTCACAA      60
GAGATGCTCC GCTACAAAGA GGTCTGCTAC TACATGCTCT TTGCCCTGGC TGCCTACGGG    120
TGGCCCATGT ACCTGATGCG GAAGCCCGCC TCGGGCCTCT GCCAACTGGC TCGGTCTCTGC    180
TCGTGTGCC TGTGTCCTGC GAGGCCGCGG TTCGCCCTG GAGTCACCAT CGAGGAAGAC     240
AACTGCTGTG GCTGTAATGC CATTGCCATC CGGCGCCACT TCCTGGACGA GAACATGACT     300
GCGGTGGGAC TCGAG                                                     315

```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAGTTGTCTC TCTGAATTAA CTTTCTCACC AATAGCTCCT CTTTAAGATC AATAACTCTT      60
ATGTTTGCAC TTTTAGGCT ATTTTCTAGA TCTTGATGT GTGTCTTATT ATTTTATTATT      120
CTTTTGTCT CCTCTGTGAA TTTTCAAATA GTCGAG                                156

```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT ACTTGAACCT AGATCTCACC CCCAGGATGT TGCGGAGGCT      60
GCTGGAGCGG CCTTGACGCG TGGCCCTGCT TGTGGGCTCC CAGCTGGCTG TCATGATGTA     120
CCTGTCACTG GGGGGCTTCC GAAGTCTCAG TGCCCTATTT GGCCGAGATC AGGGACCGAC     180
ATTTGACTAT TCTCACCTC GTGATGTCTA CAGTAACCTC GAG                          223

```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTAAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAACATCTT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAATTC TAGACCTGCC TCAGCTCCAC TCCTTATGTT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAACCTCTA TCTCTGCCTA CCAACCAATT GGTGAGGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAACAACCC AGACCATCCA GGTTCCCTTA GTGACCCCTA      240
TCTCATCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAAGTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTTGG CAAAGACCCT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
TGGAGTTTTC CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTTC GTGAAGGAAG 60
CCTCTGAATT AAAACTTTTA AATATTTCTG ATTTGCAACC AGACGAAAAA GAAGAAAATT 120
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180
TTTGTTGTTG TTTTGTTTTG TTTTGCCACA GTTTAGTTCC TCACCTGATC TTTCTTGTA 240
TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60
GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTC 180
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTC CCCAGGGCCT CAGGTTTCGAA 240
GGCTGTCATG CCAGGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTTC CGCACTTTGG TGCTTTCATC 360
CTCGATGGTG GTGTTGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCTCCT CCTTCCTTCC TTCCTTCCTC CCTCCCTCCT 60
CTCTCCTCTC TTTCTTCTT CCTTGCTCCT TTCCATCCTT CCCTCCCTCT CTCTCTTTCT 120
TTCTTTCTTT CTCTCTCTCT CTCTTTCTTT CTTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTTGATGTAG CTGTACACGAC 240
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCCTGT 300
CCTATTCACC AACATGAATT GGTGTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAAGTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
 AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60
 AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
 CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
 TTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
 GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
 GGAGACTTAA GATGCTTAAA TTTTGCTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60
 AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACCT CCAAGAGACC 120
 ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
 CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCACA AACAAATGCAA AGATCTGGTT 240
 GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
 TTCGGGGGCG CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCAG 120
 TTTGGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
 CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
 ACCCTCGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACAGC 300
 AGCACCCCGG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC	TTCATGGCCT	AAGAAATGAA	AAAGATTATT	GAAACTATGC	CAATGACTGA	60
GAAAGTTGAA	GAATTGCTGC	GTGTCATAGG	TCCATTTTAT	GAAATGTGCG	AGGACAAAAA	120
GAGTGGCAGG	AGTTCTGATA	TAACCTCAGT	CCGACTGGAG	AAAATCTCTA	AATGTTTAGA	180
AGCTGAAAGC	AGTGACAGTG	GAGCCGAGTC	TGAGGAAGAA	GAGGCCCAAG	AAGAAGTGAA	240
AGGAGCAGCC	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC	TTCATGGCCT	ATGTTTTTAT	AGCACCGATG	GTA CTGTTTT	ATTTATTGCC	60
AATAGACCAC	AACATTCA	TCTGTTTTTC	CTCAAGGGAA	CCGTATTGTC	TTTTGGTTGA	120
AGGATTATC	TATTTGATAC	TATCCAGAAT	ATTGTGAAGC	TATAATTTCC	TGGGTTATAT	180
TTTAGATGGG	TTGTCTGCAT	GGTGGTAAAA	TAAGCTTTTT	CCTCTCGCCT	ACGTCCTTTG	240
GAAGATCTCC	TGATCATACA	TAAGTAGGTA	GGGCTTATTC	TTGCTGCCCG	AGCTTGCCAC	300
CCAGCTCTAG	ACTGTTTCTT	TGAGCATTAC	TGCAGATTGG	AGACGTGTGT	GAGAGGAGCA	360
GCGCTCAGAA	ATAGGGCTTG	AGGCTCAAGC	AGAAACTGAA	GCTCTCATTC	AAATGAAGAT	420
GCTCTCTCTA	CCGCACGATC	GGCAGTGAGA	AAAGGAGGAT	GAAAATCCTT	CTCATCACAA	480
AGAGCTTGAA	GGAACCCACG	TCCCCAGATT	AGCAACCCTA	GAGTTCATCT	GCTCAGGCCG	540
GGAAATGTGT	AAGCTTCCTT	GATCAACTCC	AGGCCTCGAG			580

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC	TTCATGGCCT	ACCCAGAGAC	TCGCGGACGC	TCACGATAAC	CAAGGACGAC	60
CGCGAACCAC	GGGCAAAATA	ACATGGCAGC	CAGACGAATT	ACACAGGAGA	CTTTTGATGC	120
TGTATTACAA	GAAAAAGCCA	AACGATATCA	CATGGATGCC	AGTGGTGAGG	CTGTAAGCGA	180
AACTCTTCAG	TTTAAAGCTC	AAGATCTCTT	AAGGGCAGTC	CCAAGATCCA	GAGCAGAGAT	240
GTATGATGAC	GTCCACAGCG	ATGGCAGATA	CTCCCTCAGT	GGATCTGTAG	CTCACTCTAG	300
AGATGCCGGA	AGAGAAGGCC	TGAGAAGTGA	CGTATTTC	GGGCCTTCCT	TCAGATCAAG	360

CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG      60
TTCTCCAAA AATAACCATT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA      120
TCCAGTGGCT TCCCATATCA CGTAAATGA AACCCCAATC GTCCTTACT CTGGCCTGCA      180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCCT TTCCTTCTGT TCTCCCCTCT      240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT      300
TTGCTTTCCC CAGGGCACTC GAG                                         323

```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTC AACGAGCCCA GGAGGACATC      60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT      120
GAGATTCTGA TGAAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC      180
ATGCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG      240
AAGACACGCT ATGACACCCC CCCCGCGCTC GAG                                         273

```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC      60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATG AAGTTGCCG GTCCAAACTG      120
TCCAAATACT TGCAGGGAGT AGTTTTCCGC TGTGATAAGT GTACCTTCAC CTGCTCCAGT      180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG      240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT      300
AAGGTAAGCC GTAACCTTGA GCTGGTTGGA CGGGTAACT TGGATCAGCT GGAACAGATG      360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC      420
AAGGCTGAAG ACAGAGAGCT GATGAGATTT TCTGACCAG GGGCTGCTCT TAACACTGAG      480

```

```

AAGCGTTTTC CATGTGAATT TTGTGGACGG GCGTTTTCAC AGGGCTCTGA GTGGGAAAGA      540
CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC      600
CACCCAAAAG AGATCATGGA GAACAGTGTT AAAATGCCCT CCATAGAGGA AAAGGAAAGT      660
CTCGAG                                         666

```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```

GAATTCGGCC AAAGAGGCCT AACCAACCGAA TATAGTACAC GACCTTCCTG CAGCAGTTCT      60
AAGCTACTGT CAAGTATGGA AAATCCCGGC AATTCTGTAC TTGTGTTATA CTGATGTGAT      120
GAAATTAGAC CTAATCACAG TGGGAAGCTTT TAAGCCTATA CTTTCTACCA GAAGCTTGAA      180
GGGTTTGTTT AAGAATATTC CCCAAAGCAC TGAGATACTA AAGAAATTGA TGACAACNAA      240
TGAGATTCAG AGTAACATTT ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT      300
GTCCATTCTT TTAAGGGGAG CAGCCTGCAC TCTTTTGTAG ATTACTTTTG GGGGATATAT      360
TTTGAGAATG ATGAAACGG                                         379

```

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

```

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCCT      60
TCACACCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTGC AGCCACATGG CCCCATCCCA      120
GTTGGGGAAG CCAGGTGAGC TCTGACCTTT GGGCCTGGGC CTCTGCCCTT CCCAACCCAG      180
CCCTCGTCTC CCTCGACAGC GCCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA      240
ATGCCACGTG GTCACGTGTC ACTGCCCTGT TCATGTGCCT CTGCGGGGCA GGGCCTTCCT      300
GGTTTGTGTC ACTGCTGTAC CCAGATAGCC TCGAG                                         335

```

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

```

GCAAAGACCC AAGAAGTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG      60
CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCCAG      120
CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGGAAC AACTTCAAGA AATAGGGCAG      180

```

GAGAAGGAGC	AGTTGACCCA	GGAATTACAG	GAGGCTCGGA	AGAGTCCGGA	GAAGCGGAAG	240
GCCATGCTGG	ATGAGCTAGC	AATGGAAACG	CTGCAAGAGA	AGTCCCAGCA	CAAGGAAGAG	300
CTGGGAGCAG	TTCGTCTACG	GCATGAGAAG	GAGGTGCTGG	GGGTGCGTGC	CCGCTATGAG	360
CGTGAGCTCC	GAGAGCTGCA	TGAAGACAAG	AAGCGTCAGG	AGGAGGAGCT	CCGTGGGCAG	420
ATCCGGGAGG	AGAAGGCCCG	GACACGGGAG	CTGGAGACTC	TCCAGCAGAC	AGTGGAAGAA	480
CTTCAAGCTC	AGGTACATTC	CATGGATGGA	GCCAAGGGCT	GGTTTGAACG	GCGCTTGAAG	540
GAAGCCGAGG	AATCCCTGCA	GCAGCAGCAG	CAGGAACAAG	AGGAAGCCCT	CAAGCAGTGT	600
CGGGAGCAGC	ACGCTGCCGA	GCTGAAGGGC	AAGAAGGAGG	CGCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAATC	TAAAAGAAGA	GAAGCGACCG	GTGCTTTTAA	GGGTGTCTAA	TTTTCAAAAG	60
AGACGTCTGG	GAGTATTTTG	CTCTGGGCGT	TTGGGTGAGC	AGGACCGGGG	CGTTGGAGGG	120
TGCGGCGGGC	TTGGGAGCAG	GGAAGGTTCC	GAGTCCTAGG	GAGGCGGCAG	CGCTCGGCTA	180
TGCCCTCTGG	AGACTGGCGG	GGCTGCGGGG	CCGAGGGGAC	CCGCGAGGGA	GCCGCGCTGC	240
GGACGCGCTG	AGCGCGGGAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AGGATGTTTT	AAGGCTAGGC	CTGAGCGAGG	AGGAGGCAGG	60
GGAGACCTGG	CAGGTATTGA	AGTACCTGGG	AAGAAAGGCA	ATGGGGATGG	TGGTCCTGCT	120
CCAAGATGAT	AAGTGGAGGC	TGAGCGTCAC	TGGTACTGGG	GGCCATGATC	CCCAGGGCCA	180
CCCTGGCACC	AGGGTGCAGG	GGATGCGGGG	CCTGAGCAGG	AAGAACAGAG	ATCTGCGGGC	240
TGCACCGACC	CATCCCTGCC	CCTAGGCTGA	AGAACGGCAT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACTGAATTGG	CTTTTCTTGC	CTCTCTTTAG	TCACCTGTCA	60
CAGGAGGTTC	CTGCTCAGTA	ATGATATTGT	GAGTTAGGAT	AATAACTTTT	TTTTTTTTGT	120

```

GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTTGAAA GGAAGTGTAA GCTTTTATCT 180
TTTAACCAAC TGAACAATAC ACCAAAAGCA GCCTAGGGAT GAGCATTCTT TTGAAAGCAA 240
TTAGGTTATT CACCTGGTAT TAAAACTATT TACTGTATAA AAATCTGTGA CTTTCATGAAG 300
TTGATTTTTA AAGGCAGCAT CAAAACTGA AAAGGAAGGG AAAAAATAGG CAGCTTCTCT 360
GCACTTGTTT GGAGCTCCCC AAAACAGGAG CCATGGAGAA GTGGCATCAA GACCGGGCTG 420
CCCTTTCGAG AACACCCTGT GGCAGTTCAG AGACACGCTT TTCCTACACT GCATGCAGCC 480
GCTCGAG 487

```

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GCTGGGTTTA GGCGATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA CAGGCATGCA 60
CCACCACGCC CAGTTAATTT TTGTATTTT TGTGGGACG GGGTCTCACT TTGTTGCCCA 120
GGCTTATCTG GAACTCCTGG TTTCAGGCAG TTCTCCTTCC TTAACCTCCC AAAGTGCTGA 180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA AATATTAATC 240
ACATAATCTC ACTACCCATT GATGATTTAA CATCTAGTAT ATACATATGT ATATATAATT 300
TTAAAAGTAG GGTATATTA TATAATTACT TCATTATTCT TGTTTCCAC TTAATATACT 360
TAAGATATCT TTCAAATCA CTAAATACAG GAACATAGTA TATCATCTTT CAGTAGCCTC 420
ATTGTATAGC TAACCCCTC GAG 443

```

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT ATTGATTTC TGGGCTCAGG AGAGGATGGG GAAGGGGCTC 60
CAGACCCTCG GCGGTGCACT GTGGATGGGA GCCCCCATGA GCTGGAAAGC CGTCGGGTCA 120
AACTCCAAGG CATCTGGCT GACCTGCGGG ATGTGGATGG GCTGCCCCCA AAAGTGACTG 180
GCCCCTCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCCTFTGGC TTCTCCTCAG 240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CCTGGGGGAC TTGGCAGATC 300
TCACCGTCAC CAACGACAAC GACCTCAGCT GCGATCTGTC TGACAGCAAA GATGCTTTTA 360
AGAAGACGTG GAACCCCAAG TTCACCCTGC GCTCGCACTA CGACGGCATT CGTTCCCTGG 420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CCGCCTCCGA GGACGGCAGC CTCAGCTCT 480
GGAACCTGCA GAAGGCGGTC ACGGCCAAGA AGAATGCGGC GCTAGATGTG GAACCTATAC 540
ATGCTTTCCG GGCTCACAGG GGCCCAAGT TGGCTGGACT CGAG 584

```

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAAATTAAAA	AAATAAAATC	AAGTTCTTGG	GTGGTGGGAA	ATTGGCCTGT	ATTTTTTCTT	60
CTCAGTGGAA	TTTGCTGAGT	AAAAAATTAT	AGGCTCAAAA	ACTGAGAACT	TTGAAGATAT	120
TGCACCATAT	TCTTTTTGTA	TTGAGTGTG	CTGATGAGAA	GTCTGAGGTC	AGTCTGTTGC	180
TTGCTCTTTC	TAGGTAAACT	GTGCTTTTTA	TATTTTTC	CCTCTAGAGG	TTTGTAGAAT	240
TTACTCCTTA	TCCATGTTAT	TCTTAAATTT	CACCACATTC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	AGAATGCTTT	GAATCCATAT	CTTTTTCAGA	AACATACATG	60
GAAATACAGA	ACTACACCTG	TAATTACAGA	GGGCATATGA	ACCCTAGTTT	GATAAGCCTT	120
GCTTTAAAGG	ATGCAGTGTG	TTCTATTAAA	TGTATTTAAT	ACAATTGCAG	AAATGGAAAA	180
TGTGGACCTC	CATTAAACAA	ATTTTTTAGT	TCCTAATGAG	ATAAACTTGG	GACCAAACCG	240
ATTCTCTTGT	TTTTAGTGCT	CAAAAATAGT	TTCATTTTTA	GGTATTTATG	CTTTAGTGGC	300
CTTTCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	AAAGAGGCCT	AAGAAAAGAA	AGCAAGAACA	GAAAACGAAG	CCACAGGAAG	60
GGAAGTAGAC	ATTGTATGCT	TATGGTTTCT	CATTATGAAG	GTGCAGCTTG	TAGGAGGTTT	120
GTACGGATGT	GCTTTGAAGT	TATGTATATT	ACATATAACA	GGAAAAATA	TTAAATAAAA	180
CAGTGCTGGT	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATGGCCT ACAGCAAATC TGCCTTCACA TGGTCTGCAT TCTAGTGGAG      60
AAGTCAGATA GAGGTAAGTA CGAAGACCAC AAAGCAGGTT AAAAAGTAAG GTGGGAAAGG      120
GATGCTATTT TAGACAAGGT GGTCAAGGCA AGCCTCTCAG AAGAGGGGAT AAGTGCTCAG      180
AGACCTGACT GAAGTGAGAG TGAGCTATTG ACACGGAGAA GGGCATTTC AACTCTGAAG      240
AGAAAGCAGG GGCAGGCTTT GGAGGGAGAG CTTGTTTATG TAGACAAGGA GGGGCAAAGA      300
GTCTTGTTGA TAAAGCAGAA TGAACAAGAG TAAATGGGAT TGTAATGAA ATGACTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GGACATATGC AGTCAAAAGT AGGTGCCCAT ATATATAATG AAATACCAA AGGACAATTT      60
AGAAGTTGA ATGGAAACAT TATGGCATGC TTTAGACGTT CTGTTTTGGT TTTCTTATTC      120
CCAGTCTTTG ATCTTTTAGG TCTATCCATT GGTAAAGATA TATTAGGACT CACATCAACT      180
CAAGGTCTCG AG                                     192

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GAATTCGGCC TTCATGGCCT AGTTTATTGC TCCCAACTAT ACATCTTCAG ACTTCACTTA      60
GCATGTTACG GGTGGTTAGG TTCCAGGATT ATTGAGATCT ATTTCTACTC ACAATTGCTT      120
ATAAAATGAA ATCTATCGTC ACCTTAATTG CCTGTGCCTA AAAATATAGC ATGCTTGTCT      180
TGTGGGAAAT ATTCAGCCTG GTATGTGAGT GACTGAAATG CAACTCCGTG GAAACACCCC      240
AACTCCACAC ATTCATCCCC TTGGTAACTC AGCACAGTCA CAGAACTGA AGAAGTAAAA      300
TGATCCTCTT TATTGGCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT ACTGGCCCAA GTGAACTTT TAACAGGCTT TTTGGAGATC      60
TCTTTAGCTA GATCCAAAAA TTCATCAGGT ATATTTTCTG TTTTCCAAGT TCATGCAGGC      120
AATAGCTTTG CTAATATATA ATACTAGTTG CCTTGTTCAA GCTGCCATAT CAGTTTCATC      180
ACTCCTTTCC CAGTGCCAC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC	60
CTAACCTAAA AGTTTATTCT GTTTTAAAA TAAATGAAAG TATTTGTATG GGCCCTGGGC	120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC	180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGC AGCGACCTCG	240
GGTCACCAGG GACACGCACA CTTAGAAAGC CGTGGGCTCC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

AATCTTTAT CATTCAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT	60
GTTACAAGAA TATTTTGTTT CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG	120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTAGGA	180
CGTTCAGCCA GAGGTGATTG GAGGGATTG CACGTCTACC ACTCGTGTGT GTATCTGTGA	240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT	300
TATCTCTATA ATTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT	60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG	100

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA    60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA    120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT    180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA    240
GAGAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG    300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA    60
AGTGGAAACT TTGGAACATT GTTGAACCA GTAAGAATCC CATTCTCAG GTATCAGGTC    120
GTTAAAGTAG TTTAAATATA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCTCCCTTT    180
AACTTGTGTG TATAAATATA TGTGTGTGAT GTTTCTCTT ACAAAGATAG TACTCGAG     238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA    60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT    120
TTGTTTGTGTT TTTTGTGTTT GTTTGTGTTT GAGACAGGAT TTGCTTTGT TGCCCAAGGCT    180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG         234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

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GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG    60

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GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG      120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG      180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGGAAGATGA ATGCAAAACC      240
TTGAGGCAGA AAGTGGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G          291

```

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT      60
TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC      120
AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACACGGGG AAGCAGTTTG CGCCTGGTGC      180
CTGATGATGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCTT      240
CCAGGTCAGT TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC      300
AACTCCTCAT CACCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC      360
CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC      420
TCAACGCTCG AG                                432

```

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA      60
AACGGGCCCT CAAATTTATC AAGAAAAGGG TGGGGACGCA CATCCGCGCC AAGAGGAAGC      120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG      180
CCCCCTCCCT GCCCTCTCCC TGAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG      240
CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCCTGTCTG GTGCCCCGTC      300
TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCGGCCACAC      360
CTTCCCGGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG                                399

```

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

GAATTCGGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC      60

```

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA 120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAATACAA CGTATACTGG 180
ACCAGAAGTT TCAGATCCAA TGAGTTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT 240
CACAAATTCCT CCAAAATATA GGGAACTATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC 300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT 360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAAACTGAA AAAGAGGAAT CTACAGAAGT 420
TTTAAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCAAG AGAAGAAAAG 480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG 520

```

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG 60
CATTTTAATA AAATTTTAAA ATTTCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA 120
CTCCTCGAG 129

```

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA 60
GAGCATAATG CAGTCCAACA CATTAAACCA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA 120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTTCGGAGG CTGGAACAGG AGAAGCTGGA 180
GCTGAGCAGG AAGCTGCAAG AGTCCACCCA GACCGTGCAG TCCCTCCACG GCTCATCTCG 240
GGCCCTCAGC AATTCAAACC GAGATAAAGA AATCAAAAAG CTAAATGAAG AAATCGAACG 300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG 337

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC 60
TTGCTGTGGG GTGTACCTG GGGCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG 120
CCCAGCTGT GGGCAGAGTC CGAATCACTG CTGAAACCTT TGGCCAATGT GACGCTGACG 180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCAGGAG 240
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTGAGAAGT GTGGTGGCTG ATACTGACCA 180
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
GAAAAAAGAA ATTCCAGTGT CAATTAAGAA AGAGCCTGAA GTTACTGTAG TTTACAGGCC 300
CACTGAACCT CAGCCTGTTT TAATACCAGG TATTAATATC AACTCTGACA GTGGAGAAAA 360
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420
TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTTCCACT GCTGATACTA GCAGTATTGA 480
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAACTAAA GACAGTGGAT CGATATCTTT 540
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
CTGAGATTTC TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAAT TGTATTGCTT 180
AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240
GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTCTG ATTTCACCAG TAATTCATAA 360
CCACAACTGT TGTGTCTTGA AACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTCAC 420
TTTATCTCTA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGT TACCTGNTAT CCTGATGGTG CCATGTGCTA      60
GCTGGGTGAC AATAACCCAG CCACCTAACA TCTCAAAGAT TGTTCCTTTT TGTGTGAAAT      120
AGGGATAGAG TTGTCTACTT CCCAGAGCCA GATAGAGAAC TTAAGAGATG AATCTGAAAA      180
TACAATAGCC TAAATAAATT CAAGGAAACA CTATTATCTT ACTGGATCTT TCCAGCAACC      240
ATGTTACTTT TGGCTGGATT TTGTATTTTC CAATTTGTGA ATGACACAAC AAAGAGCTAG      300
GTAGGTAAAG TAAATGGTTT CAGATAATAA GCCCAGTTAG CCCAGACGTT TATTTTCCAT      360
TTGCATAGAA AATGAATGTT TTATGCATAC ATTTGTTTGC CCAGGGCTAG GATATTACTT      420
GCATATGATG TTCTTATATA ATTAAAAAA AGAATACAAC CTCGAG                          466

```

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AATTCACAG GGAAATGGGC AGACTGAACC AGTCCAGGTG      60
GTGAATTTTC CAAGAACATA GTTTAAGTTG ATTAAAAATG CTTTLAGAAT GCAGGAGCCT      120
ACTTCTAGCT GTATTTTGTG TATGCTTAAA TAAAAATAAA AATTCATAAC CAAAGAGAAT      180
CCACATTAG CTTGTTAGTA ATGCTCTGAC CAAGCCGAGA TGCCCATCTT CTTAGTGATG      240
GCGGCGTTAG GGTTTGAGAG AAGGGAATTT GGCTCAACTT CAGTTGAGAG GGTGCAGTCC      300
AGACAGCTTG ACTGCTTTTA AATGACCAAA GATGACCTGT GGTAAAGCAAC CTGGGCATCT      360
TAGGAAGCAG TCCCTGGAGA AGGCATGTTT CCAGAAAGGT CTCTGGAGGG ACAAACTCAC      420
TCAGTAAAC ATAATGTATC ATGAAGAAAA CTGATTCTCT ATGACATGAA ATGAAAATTT      480
TAATGCATTG TTATAATTAC TAATGTACGC AGACTCGAG                          519

```

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```

GAATTCGGCC TTCATGGCCT ACTAGACCCC CGCCACAGCA GCCTCTGAAG TTGGACAGCA      60
AAACCATTGC TCACTACCC ATCGGTGTCC ATTTATAGAA TAATGTGGGA AGAAACAAAC      120
CCGTTTATG ATTTACTCAT TATCGCCTTT TGACAGCTGT GCTGTAACAC AAGTAGATGC      180
CTGAACCTGA ATTAATCCAC ACATCAGTAA TGTATTCTAT CTCTCTTAC ATTTTGGTCT      240
CTATACTACA TTATTAATGG GTTTGTGTA CTGTAAAGAA TTAGCTGTA TCAAACTAGT      300
GCATGAATAG ATTCTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```

GAATTCGGCC TTCATGGCCT AAATGGGAAT CATCATTGCA TAACAAACCT AAAGAGAAAA    60
TGAGAACATT TACGAAGAAG AAACAGAGTT ACTGTACCAA GGGCAAAAAG AAAAGAAGGG    120
GGAAAAAAA TAAGTCCATA AAAGAAAAAC AAAAGGAATC CATGAGCCTG GACGACAAGC    180
CGTGGGGGAT GTAAGAAGGT TTGGAACCCA AAAGGCAAGT CTAATCAGCT GGGGTAACAT    240
GGCGAGGCAG TTCCACATGC TGAGACTTGT GGCTACCACA TTA AAAAAGA CTGTGCATAT    300
TCTAAATGAC AGCAGTCCTG CAGTGACGTG GATATTCACT CTAGAAGCTA TGCAGGCAGG    360
CGTGGGAAAA GCGAAGAGAT GTTGCACCAT GCAGCTGCAA TCTTTATGTC TCTACTGGCA    420
CAACCGAAAA GAGTAATGTG GAAATTATCC AGAGAATTTA GGTGAGAAAA ACAGAAGCCA    480
TCAGATTTTC TCCTTTAAAT CTTGAGAGGG GTATACACTC CCCTGGAAAA CCAAGTTGCC    540
TCTCTGCTCA CATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```

GAATTCGGCC TTCATGGCCT AGGGGAGTCC TCATTCTGAC CTCAAAGAAA GGACTGTATT    60
GTCTGGCTCC ATAATGCAGG GGACACCAAG AGCAACAACCT GAAAGCTTTG AAGATGGCCT    120
TAAATATCCC AAACAAATTA AAAGGGAAAG TCCTCCCATTA CGAGCATTG AAGGTGCCAT    180
TACCAAAGGA AAACCATATG ATGGCATCAC CACCATCAAA GAAATGGGGC GTTCCATTCA    240
TGAGATTCCA AGGCAAGATA TTTAACTCA GGAAAGTCGG AAAACTCCAG AAGTGGTCCA    300
GAGCACACGG CCGATAATTG AGGGTTCCAT TTCCCAGGGC ACACCAATAA AGTTTGACAA    360
CAACTCAGGT CAATCTGCCA TCAAAACAAA TGTCAAATCC TTAATCACGG GGCCTAGCAA    420
ACTATCCCGT GGAATGCCTC CGCTGGAAAT TGTGCCAGAG AACATAAAG TGGTAGAACG    480
GGGAAAATAT GAGGATGTGA AAGCAGGCGA GACCGTGGCT TCCCGGCACA CGTCAGTGGT    540
AAGCTCTGGC CCCTCCGTTT TTAGGTCCAC ACTGCATGAA GCTCCCAAG CACAACCTGAG    600
CCCTGGGATT TATGATGACA CCAGTGTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```

AAATGACACT GAATGACACG TTAGCCAAAA CTAACAGAGA ATTATTAGAT GTGAAGAAAA    60
AATTGAAGA TATAAATCAG GAATTTGTAA AAATAAAAGA TAAGAAATGAA ATATTAAAAA    120
GAAACCTGGA AAACACTCAG AACCAATAA AAGCTGAGTA CATCAGCCTG GCAGAGCACG    180
AGGCAAAGAT GAGCTCGCTA AGTCAGAGCA TGAGAAAGGT GCAGGATAGT AATGCTGAAA    240
TCTTGGCCAA CTACAGAAAA GGCCAAGAAG AGATTGTGAC ACTGCATGCC GAAATTAAG    300
CCCAGAAGAA GGAGCTCGAC ACAATACAAG AATGCATTAA GGTAAATAT GCCCAATTG    360
TCAGCTTTGA GGAGTGCAG AGAAAATTTA AAGCAACAGA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```

GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAACT      60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATAGTCCCT      120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG      180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA      240
ATTAACAATG GGCTTCATAA TGTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG      300
AAAGCTCAAG AAATTCAAAA GAAATGTGG GACTCACTCG AG                                342

```

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```

GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA      60
GAAGCCAAGG AATTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTGCCTTC      120
CAACATTTC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTCACCTT      180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG      240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTTT AACAAATCTT      300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA      360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA      420
TGCCAGCNGA TTCAGGAGTA TACCACTGCT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```

GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG      60
GCAGTCAGAC AGGGGGATT TGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC      120
GACGGCGGTC GGGGGACACC TGCAGTGAGA GGCTCCCCTC TCAGCACACT CGTCTCGCTT      180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA      240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAGCTGC      300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC      360
CCGCTGCACC CCCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA      420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG      480
GCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAAGCC TCAGGACAGA CCCCGCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGCA AGGGGTCCAG CAGGGCCCCG AGCTTCCAGA TGGTGGCACG      300
GCTCAGCAGG GCGGGACCA GCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
GTCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAATAACAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAAATGAAAC AATCAGACAT GAAAATAAAC CGTATGTTC TAGTTCAGCA CAAATGACAA      300
GAAGGAAAT CCAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTGA AAAAGTCACA AACTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA      180
CAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTCTCT      360

```

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT 420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60
TACAGTTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTGCCC AACATGCAGG TTGAAGGTGT 180
TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240
AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300
GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTAGGAT ATGGGTTTGC 360
TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCCAGGTGG 420
TGTCGGGTTT GACATCAACT GTGGTGTCG CTGCTAAGA ACCAATTTAG ATGAAAGTGA 480
TGTCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540
GGGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTCCT 60
CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG 120
TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAAG 180
AGCTCTGAAC TGTATTGAGA CCGACTGGGT ATCTAGCTTA CTGTTTTAAC ATCATTGTTG 240
AAACCAGACC CTGTAGTCCA GTGGTGCTGC CCTGTTGTGC AAAC TGCTCC 300
GTTTTTGTAA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360
GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420
AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:


```

GAATTCGGCC TTCATGGCCT ACGTGGCTAT AACTGGAAAA CTGGATCCGA AATCGACCAG      60
TAAACTGGGT AGCTCGGTCT ACGCCCCGCC CACCACCCTT GCTAGCCAAT AGCCTTCACA      120
ACTCTTCTGC CACTCCCGCC CATTCCAGTG CTGTGCCGCT GCTTTTCTT CCACTCGGAT      180
CTCTTGAGCG CCCTTAGCCC GCTGTATACG CGCCCCTCCT CGGCTTCAGT AGGCAAGAGG      240
GCCATCTGCC CTTCTTCCT GAAGGTAGAG GGGACAACAC CAGCTACGAC GGGGACTCCA      300
GAAGTCCATC TCCCCAACAG CAGCGGGGCG AAAAGAAAAGA AAAAGGGTTT CCGAAGACTC      360
CTACTCACAC CCACGCTTTC CCTTAACCCG GAAGTGATTT CCGCCCCCTC TCTCCCTCTT      420
CGGTGATAC TGGAGGAGAA GGACGGCCAG GTCTGGCCCG GCATGCCCTG GGCTTCCGGT      480
GACCTCTGGC CCTTTTCTGT CGTCCACTCT CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC AAAGAGGCCT ACAGAAACAT CCAATTCTCA AACTGAAGCT CGCACTCTCG      60
CCTCCAGCAT GAAAGTCTCT GCCGCCCTTC TGTGCCTGCT GCTCATAGCA GCCACCTTCA      120
TTCCCCAAGG GCTCGCTCAG CCAGATGCAA TCAATGCCCC AGTCACCTGC TGCTATAACT      180
TCACCAATAG GAAGATCTCA GTGCAGAGGC TCGCAGAGTA TAGAAGAATC ACCAGCAGCA      240
AGTGTCCCAA AGAAGCTGTG ATCTTCAAGA CCATTGTGGC CAAGGAGATC TGTGCTGACC      300
CCAAGCAGAA GTGGGTTTCA GATTCCATGA ACCTCGAG      338

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC AAAGAGGCCT ACCAGGATGG TCTCAATCTC CTGACCTCAT GATCTGCCTG      60
CCTCGGCCCT CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCGCACCCGG CCCTAAACCC      120
TAGGTTTTGA CTTCTGTAAG AAGGAAAGAT TTAAACAAAC AAACAAACAT TAAATTACAA      180
CCATAATAAA CAAAAAACA CTAACTAAA TTACAACCAT AATAAAATCT CCCAAAGTCC      240
GTAGGCACTG ACATATTACA GCCTTGCCAA ATCAGAATAG ATTTCTCATG TGTGTCAAT      300
TTACCAGACA CAAAGAGTAG CTCAGATCTC ATAGACTCTT CAGATCTTGT AGACTAATT      360
CAAGTCTTTT TAAAGTTTGA AAAACATGT GCTATTGGA ATTACGTCAT CCTCGAATAT      420
TAAACCTGAG CTCAAAAACC TATTGTTTGA TATTGGAAAT AGTTAACTCC AGTTTCTTTC      480
TATTAAGATA AAATTCTTTC ATCATGTCTG TGCCCTCTAA AATAATACTC CTATTGCTTT      540
GTCTTCCCCT TCTCCCCTCC TAGTCCTTCT TTAGTCATTG TATTTAGAAT CAAGTCGCTC      600
ATGAGTTTAA GAATTAGAGC AGCAAGAAAT TGGGCTAGAG ATGTACAAAA GCTTTGGACA      660
ATAGTAGTTT TGCTTGTCCT CATCTTATT AGAAGTGCTG TTAATTTACT GATAAATTCT      720
AGGACGGAAG ACAAATCTTT GCAACTGGTA CTCGAG      756

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```
GAATTCGGCC AAAGAGGCCT ACCAGGAAGC TCTCCTGCTT GTCATGAAGT GAGAACAATG      60
AAAAGTCATA GCAGATACTC AGTTTAACTC TGTGTAGAAC CTATTAGTGT TTGAGCTGTT      120
ATTCAGATTG GAATTCAGAC TGTGTGTTGT TTGCTTATGG ACGTGCCTG TCGTTCTGTC      180
ACTGTTAAAT TAATGAGTCT ATAAGGTTTT TCTTCCAGAG GCCATAGGTG ACATCACTAA      240
AATGCAAGA TAAATTGTAA TCTTGTGNTG TGCTGCACTC CCCAACCTCT CCCCCACCCC      300
CCGTGGTGTG CTGCTTTCTA GATGAGCGTG TTTTGAGGCA GGCCCATCTG GGACACTCTA      360
TGCTTTCACC AAGGAAGTGC GATCTGAGCA GCCACAATCC AGCCAAAAGA GGATCGTAGA      420
TATTGCTCTG GATCAACTAG ATGAAAATAT AGCAGAATGG ATTTAGCCCA CTGCTCTGTT      480
TTATCCAACT GAGTCTCTGA CCAGCAATTG GTGCATAATT ATTACAGCAA AAGTTAAGAA      540
ATGAAACTGT AGCAATTATG TAAATGAATG TGTGGCCTC TTAATACCTG TTAGTAGTGG      600
ACTTCCTGTG AGGAAGTTAG TTTTGTGTTT TGATGAAATG CTCTCGAG      648
```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```
GAATTCGGCC AAAGAGGCCT AAGAGGCTGG CCCCAGTCCC AAGGAACAAG AGATGGTCAA      60
GTCGCTAGAG ACATATCAGG GGACATTAGG ATTGGGGAAG ACGTTGACT GCTAGAATCA      120
GAGGTTGGAC ACTATACATA AGAACAGGCT CACATGGGAG GCTGGAGGTG GGTACCCAGC      180
TGCTGTGGAA CGGTATGGA CAGGTCATAA ACCTAGAGTC AGTGTCCTGT TGGTCTTAGC      240
CCATTTGAGC ACCCTGCCAC TTGGAGTGGG CCCCCTCTAC TCTTCTTAGC GCCTACCCCTC      300
ATACCTATCT CCCTCCTCCC ATCTCCTAGG GGAAGTGGCG CAAATGGTCT CTCCCTGCCA      360
ATTTTGGTAT CTCTCTGGC CTCTCCAGTC CTGCTTACTC CTCTATTTT AAAGTGCCAA      420
ACAAATCCCC TTCCTCTTTC TCAAAGCACA GTAATGTGGC ACTGAGCCCT ACCCAGCACC      480
TCAGTGAAGG GGGCCTGCTT GCTCTTTATT TTGGTCCCGG ATCCTGGGGT GGGGCAGAAA      540
TATTTTCTGG GCTGGGGTAG GAGGAAGGTT GTTGCAAGCA TCTACTGCTG CTGTACCCTA      600
GAAGCTCGAG      610
```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```
GAATTCGGCC AAAGAGGCCT AGCCACTATC CTGGTTACTT GTGGATTAC CAGCAGTCC      60
AGCAAGTCAT CCGTAGAAAT GAATGTTTGA GGAGTCGTAG TAGTATTTGA GGCAATCTGT      120
TCCTCAATTG CATTTTCACT GTTGCTCAAT ATTTGTTGTC TCTTGGCACA ATGCAATTTT      180
CCAAAGTGTG CTCCATCCTT GTCCACAAAG TCTTCCCAT CACTTCCAAA TATGCCTCCT      240
```

CTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT 60
 GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT 120
 TTTTTTTTGG TTTTGTCTGT GTAGTTATGG CACTAGTCTC GAG 163

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT 60
 TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA 120
 TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG 180
 ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGTCTTC 240
 CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC 300
 TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA 360
 GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA 420
 GTGTGGCTCC TCCTGGGCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTGGATGTG GATGGGGATG 60
 ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTATCCCC TGACAGGCG 120
 AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCCTA AATGGCGGCC 180
 CTCCAGCAC GCGCATCACA CCTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA 240
 CCAGCAATGG TGAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC 300
 TCGAG 357

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACAAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTTGT ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAACCCGG      240
TATATATGTA TGCATTAAAT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAATATAAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAAATTGC CAGGTTTCTT CGAG                          464

```

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGATGAT      60
TTGTATCACG AGGGGGAAAG GTCCTTACTG TTTTTCAGTA CCTACAGTTG TGATAGAGGC      120
TCCTCCCAGC CCCGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTTGGGGGC AGCATATGGA ACCCAAAAT AGTATCATAG      240
CCTAAATTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTCAGCAG      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCTCCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACCTAG TCAATGAAAA ATGATTGTGA AACTCTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                          650

```

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAAATTCC TAAGTAGCCA      60
ACTGATTTGC AGTGCCAGAA ATGAATACCG ATCCACTCGA G                          101

```

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 723 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```

GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTACTTCAAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCCTAGTG CATTGATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTTCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                    723

```

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```

GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GGCGCCAGTC AGGGAGCGGC      60
CGTGGCCCG AGAGTGAGGA AGCGCGAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCATGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```

GAATTCGGCC TTCATGGCCT ACGCCCGGTT TGAAGTGTG CAGTCAATGA GCTCCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCGGTT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTTC CTGAGGGCTT CCTGCTGCTT CTTCCGAGG GCTGTGTTAC GCTGCCAGTT      180

```

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTTGGGGC 240
 TTTTGGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT 300
 CCGCTCAGCC AGCTGGGTGT TCCCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT 60
 TCACTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTAC 120
 CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAACA CAGAAAACCT ATCTCAAATA 180
 TAAAAGATGA ATATAAATT ATTAATTAA CAACTGGCGC TCGAG 225

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG 60
 CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT 120
 TTTTCTTTT TTTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA 180
 TCTCAGCTCA CTGCAACCTC TGCCTCCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC 240
 GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTAA ATTTGAAGAT 60
 ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT 120
 TATTTTAAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC 180
 TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG 240
 CGATATCCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAGT CTTTGAAGAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283
```

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```
GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAAAC ATATTTCATCC    300
CACAGAAAAG CTCGAG                      316
```

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```
GGGATGCATA GATTTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGT    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTTAAGC ACAAATTAA ATCTCTCCTA    120
TTTTTATATG ATTTCCGTT GTTTTCTTCC CTGTAGGGA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256
```

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```

GCAAGCGGCG CATGCAGGAG GAGAAGCAGA AGTCTGTCAA CGTCAAGAAG ACCATCCTGG      60
AGATGCGCTA CGGGGCTGAT GTGGATGCCG GCTCCATTGT GCACGCCGCC CAGAAAGCTGG      120
GCGAGCCTCC CGTGCTGCCC GTATCTCGCA TGGCCTCCAT CCCCTCCATG ATCGGGGAGA      180
AGCTGCCAC  CGCCAAGGGG TTGGAGGCCG GGCTGGACAC ACCCAAGGTA GCCACCAAAG      240
GCAACTATAT CGAGGTGCGC ACAGGCGCCG GCGGGGACGG TCTGGCTCGG CCCGAGGATG      300
ACCTCCCGGA CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ACGAACTCCT GACCTCAAGT GATCGGCCTG CTCAGCCTC      60
CTAAAGTGCT GGGATAGCCA CTGTGCCAG CCTAGCCCTT CTTCAAATGT TTGGTAAAT      120
TCAGCATTGA AGCCATCAGG TCTTGGGCTT TTTGCTGGA GATTTTTTAT TATGGCATCA      180
ATCTCATTAC TTGTTACTGG CCTGTTTAGG TTTTCAGTTT TTTTCATGGT CAATCTTGGT      240
AGGTTGTTTG TGTCTAGGAA TGTATCTGTT TCTTCTAGGT TTTCCAGTTT CTGCGGTAT      300
AGTTACTCAT AGTAGCCACT AATTATCCTT TGGATTCTG CGGTATTGGT TGTAGTGTC      360
CCATCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAAGCCTAT CTTTAGTCT      60
TCCTAGAAGC ACCGTGTTCT GTGGAACTCA GCATCAGCAG CTTTGCTGAG GACTCCCCCA      120
TCTTCCTTTC CTTCCCCGGA AAGCACAGAC CTAAGTGAGT CTTCACTGGA TCCCAGCTAA      180
CAGCTTCTGC CCATTCTAT CTTTCCACAG AGCCAGTGGC AGCCCCAGCT GCAGCAGCTA      240
CGTGACATGG GCATCCAGGA CGATGAGCTG AGCCTGCGGG CCCTGCAGGC CACCGGTGGG      300
GACATCCAAG CAGCCCTGGA GTCATCTTT GCTGGAGGAG CCCCATGAAC TCCCTGCTTC      360
CCCTGAACCC CCAGCACTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```

GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC      60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT      120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT      180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCC GGACTGTTGA GATAATCCAG      240
GTGGACGAAG ACATCCCAGC TGCAACATCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

```

GAATTCGGCC TTCATGGCCT ACAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA      60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTTGCAG TGAGCTGAAA TCATGCCACT      120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAT AGCGAGAGAT      180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG      240
TTACAGGGTT TCTTTGGGG ATAACGAAAA TGTCTAAAA CTGGACTGTG GTGATAACTG      300
CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GCGCGGCAG CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

```

GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT      60
TCATAGAGAT ACTATCATCC TCATTTTATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA      120
TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTGGCCCTT      180
CGAG                                184

```

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT      60
TCAATATCCT GACGTTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTAT TTAGGGCTTT CACTGGATT GTCAACCCAT ACTTTCATAA      240
TCCATTTTCT CTGATTTTCT TTCTGGTTT TGGTGAGGCT ATAGTTGGGA TGGGGTTTTT      300
TTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTACTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTCCT TGAAGAAATT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCACAACCTGC ACTGATATCT ATTTTGTCAA AGCCTTCAGG TCTCGAG      167

```

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAGGGGAG TCAGCAAAAC CAGAAATTTT      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTTT TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCT      240
GGAAAGGAGC CAGATCACCA GGGATCATAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAACTC AGCAAACAGG ACTTTTTCAT AGGTTTTCAT GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATTC CCCATATTG GTTGACCTT GCTGAACTGG TGACCCCAT      420
GTTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATTG CACCTACTAT GCAACAAAT      540
GAGCCATAAG AAAGTGGGAG CTTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC      660
TGACAGTCCC TGTTCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG      733

```

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG TTCTGCAGAA GAAATCACTG TTTGTCCTGA GACACAGGTA AGTTCCTCTG	60
AAACTTTTGA CCTTGAAAGA GAAGTCTCTC CAGGTAGCAG AGATATCTTG GATGGAGTCA	120
GAATAATAAT GGCAGATAAG GAGSTTGGTA ACAAGGAAGA TGCTGAGAAG GAAGTAGCTA	180
TTTCTACCTT CTCATCCAGT AACCAGGTAT CCTGCCCCGT ATGTGACCAA TGCTTTCCAC	240
CCACAAAGAT TGAACGACAT GCCATGTA CTGCAATGGTCT GATGGAGGAA GATACAGTAT	300
TGACTCGGAG ACAAAAAGAG GCCAAGACCA AGAGTGACAG TGGGACAGCT GCCCAGACTT	360
CTCTAGACAT TGACAAGAAT GAGAAGTGT ACCTCTGTAA ATCCCTGGTC CCATTTAGAG	420
AGTATCAGTG TCATGTGGAC TCCTGTCTCC AGCTTGCAAA GGCTGACCAA GGAGATGGAC	480
CTGAAGGGAG TGAAGAGCA CGTTCGCTCG AG	512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC CTTTCATGGCC TACTCTCATC TGTATCTGTT TCCTCTAACT TTACTGAAAA	60
GATAGAATTC ATTAAGCATG AATTCTACCA TCTTCTCCCT ACTACAGCTC TGTCAAAAAG	120
ATGTTGCTCT CTGAGCCCAA CTCTCCCTCA GTCCCCAGGA TTCTGTCCCT GTCCACCTTT	180
AATCTTTTCC TTTCTGATT TTATGTTATA AGTTATTTAG ATTTGATGA GAGATAATCG	240
TACCTAGAGT ATGGGAGAAC TATTTAAGGT TTACAGGTTG GGTGGAACCC TTGTATATAC	300
TAGATGGTAC TGTGAGGGCT TGCCCACTG TCAGCCTTCA TCTGAACAGA GCAGAAAGTG	360
TTTCTGCATG TTCACCAAGC CTGCTGGAC TGTATCACTT TTCTCTGTGG GCCAAACTC	420
GAG	423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC TTCATGGCCT AGCGGCCTCA GATGAATGCG GCTGTTAAGA CCTGCAATAA	60
TCCAGAATGG CTA CTCTCTGAT CTATGTTGAT AAGGAAAATG GAGAACCAGG CACCCGTGTG	120
GTGCTAAGG ATGGGCTGAA GCTGGGGTCT GGACCTTCAA TCAAAGCCTT AGATGGGAGA	180
TCTCAAGTTT CAACACCACG TTTTGGCAAA ACGTTGATG CCCCACCAGC CTTACCTAAA	240
GCTACTAGAA AGGCTTTGGG AACTGTCAAC AGAGCTACAG AAAAGTCTGT AAAGACCAAG	300
GGACCCCTCA AACAAAAACA GCCAAGCTTT TCTGCCAAAA AGATGATCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```

GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTTCATTC      60
TCTACGCAAG GATGTTCTTC GGAATGGAG GCGACATTGC TGCCTGCTTT TTTGAGGGAA      120
TTGATGATGT TCACTGGAAG GAAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA      180
ACATGTTCAA CCAAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG      240
AGACATGGAA TGTAAGGCC AGCCAGAAA AGGGGGCAGA GACATGGTTT GATTCTTACG      300
ACTGTTCCAA ATTTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTGGA GCAGAGTTCA      360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG      420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGTTTA GCCATAAAA      480
GATTTTATTA CCCCTTCAAC CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```

GATGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG      60
CAAGGTGGCC GAGTGCCAGA GGAAGCTGAA GGAGCTGGAG GTGGCCGAGG GCGGCAAGGC      120
AGAGCTGGAG CGCCTGCAGG CCGAGGCACA GCAGCTGCGC AAGGAGGAGC GGAGCTGGGA      180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT      240
CAGCAAAGAC GGCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA      300
CTCAGAGGAG GTGAGGGAGC AGAAACACAA GCTCGAG                               337

```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```

GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTTCTTT CTTTCTTTCT      60
TTTCTTTCTT TCTTTCCTTC TTTCTTTCTT TCTTTTTTTG AGACAGAGTC TTGTTCTGTT      120
GCCAGACTGG AGTGCACTGA CTCAATCTCA GCTCACTGCA ACCTCCACCT CCCAGGTTCA      180
AGCAATTGTC CTCCTCAGC GAGGACCTGC CTCGAG                               216

```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

```

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA    60
TTTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG    120
ACTATGACCA AGAGCCAGAT GATGATTACC AAACAGGATT CCCATTTCTG CAAAATGTAG    180
ACTACGGAGT TCCTTTTCAT CAGTATACTT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA    240
CTAACTTTCC ATCATCAATG TACTGTGATA ATCGCAAAC CAAGACTATC CCAAATATTC    300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT    360
CATTCAATCA TGCAACTCAT CTCGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

```

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTCAG CTTCTCACTC AGAATTTAAG    60
CTGTTTTTCAG TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA    120
AGCGTATAGG TGTTTGGAGA TAACCGTATT CATAGGAAAA ACAAAACATAA AACTTTCATA    180
ATTTTGGGAA GAGTTACACA CAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC    240
ATTTGTTTGT CCTAAAGGTT GAAATGAACA GAATCATGAT GGAATACTC GAG             293

```

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCCTGTGTC    60
CTGCAAGACC CCCTTTGGTT TGGTTTCTT TTCTTTCTT TTTTCTTTT TTGAGACTGC    120
GTCTTGCTCT GTCTCCAGG CTCGAG                                     146

```

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

```

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC    60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TTGCTTGATC CTGTCTCTAA    120

```

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	TTCATGGCCT	AGCTGATTTA	AATCTAAAAA	CTGGATAAGA	AGCTGTGGCT	60
TGTAATTAAA	AATAGACCTT	TATCACTAG	ACCTACAGTT	TGCTTTTTTC	ATATGTTAAG	120
AAAAGTTTAA	TATCCTGCT	CTCTATTTC	GTTCTAGGGG	CACCACTATC	AGTTAACCCCT	180
AAAGATTTCT	GTGGGTGAAA	CCATTTTGAT	TACCATCTTG	CTCTGCTGCC	AGTTATGGTA	240
ACCAAACCTCT	CTTTGTTTCT	GGATGCTAAA	TCTGTCCACT	TGTGCCTTAA	CTACATCCTA	300
ACTCCCGTCA	ACTCGAG					317

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC	TTCATGGCCT	AGCCCCCGGA	GCCCACCACA	GTCCCCAGAG	TGTGATAAAA	60
ACAAATTTTA	TACTTCTTAT	CTCTTTCTAG	TAGTCTACAT	CCCATTCCCA	GTCTTTCCAA	120
TCATAAAAT	TTGTAGTTTA	TTTAGTTCAC	ACTTGAACGT	CCTATGAAAC	TGTTTTAAAC	180
CTTTACCTA	TCTTGTTTCT	TGTCATTATT	CTTAAGCCAT	TGATACAGAA	ATCAGAACCA	240
AATTTAATAT	TGTTGTGGGT	ATGAGACAGT	TTCTGTCATG	TTTTAATTTT	TTCTTTAAAG	300
TTTACTATG	TACTTCATAT	ATACCGGGCA	CTTCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	TCATGGCCTA	TGACTTTTAA	GTTTCTTATT	ACACTGAGAA	ACACCTAACT	60
ATCCTAATAG	AATTAAATTT	CCCTAAGTTA	TAAGACACTT	GAATTTTTTA	AAAAGAGATA	120
ATTAAATTTT	TCCTATATTT	TATTTTATTT	ATTTTTTCAG	TCATGCTCCT	TCTGTATCTC	180
CTATATTTTA	TTATATTACT	TACATGGCTT	TATTTTTTACA	ATAACTCTTT	TTTTCCCTTC	240
TTTTATTAT	TGTTTATTT	TTGGAAACAG	AGTTTCCTTA	TGCTGCCAC	GCTGGTCCCTG	300
AGCTCAAGCA	ATCTTCACGC	CTCAGCCTCC	CAAAATTATA	GGACTACAGG	CATGAGCCAC	360
TGTGCCTGGC	CTAAGCCACT	GCACCGGCG	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAATC CTACATTGGT      60
CATTGGGAAA ATATTGATT ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT      120
CTACAATATC AGAAACTCAA TTGTGTAATG TTACTACTAG TCTCATCAGA AATGTCTTTA      180
AGTATTTGTT AACTGGCAA CTCTAGTGA CGACTACAGG CTTCCAGAA TTTTCATTTT      240
CATTGAAGT CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTTAT ACATTGTGTC      60
TGAATGCTGG TTTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT      120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC      180
TCCAATTCTT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATACGCTAA      240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC      300
ACCTACTTCC ACACCCCTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTCAGAAA CACATGTGCA      60
AGGGAGCTGT GCCAAGCTCA TGTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA      120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAA CAAATTATAT      180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA      240
AGTTCCAGGA GATGACTATA AGAACAACT CATCTTCGCA ATATCTGTGA CTGTAATACT      300
AATAATTTG ATTATAATT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 540 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAGG GTTCTGAAAA TAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAATG      120
AAAACCTCAT GTAAATTTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTT AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCAGA      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TTCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTCAG AAAGCGTTAG TGAATAGGA AGTGATGAGG AATCTGAAAA TGAAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATGACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC TTCATGGCCT AGCATTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTTATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAT AATTTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTGTCT CTTGTTCTGT ATCAAAGGTG      360
AAGAGTTTGT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACAGCT GCTGAGCCTC TCTGAGCCCC AGTTTCTCG TCTCTAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
TTCCACAGCT CTGATATTCA GTAACCCATG TGGAGAACAA AAGGATTTTG CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAG      120
TAAATATTGA CCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCAATCAGTC AGAGTCTGCC AGCCAGCAA GCAGGAGAGA CAGGAATATC AAAAAGGCGC      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCAATTCCT CCACCACAGG CCTCGAG      297
```


(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTTCTT ATCCCAGTCA GCTGGCCAAA ACATTAACTT TGGATTCTCT      120
ACCTTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTTCCCCATC      180
CGCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCCGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTACCGTTC CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTGCGA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCCATGT GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCCCTG ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGAGAGAG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACTACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC	TTCATGGCCT	ACCTGAGCTG	CCGAAGCCGC	CGTCCTGCTC	TCCCGCGTGG	60
GCTTCTCTAA	TTCCATTGTT	TTTTTTAGAT	TCTCTCGGGC	CTAGCCGTC	TTGGAACCCG	120
ATATTCGGGC	TGGGCGGTTC	CGCGGCCTGG	GCCTAGGGGC	TTAACAGTAG	CAACAGAAGC	180
GGCGGCGGCG	GCAGCAGCAG	CAGCAGCAAT	CTCTTCCCGA	ACACGAGCAC	CACAGGCGCC	240
CGAAGGCCCG	AACAGGCGTT	TAGAGAAAAT	GGCAGACGAT	ATTGATATTG	AAGCTCTAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC	TTCATGGCCT	ACCAGAAAAA	ACTTACATTG	AAGAGAGGAT	TCCTTGTTTT	60
GACTATGTGT	GTTTCTGCCG	TCTTAGGCAG	CCAACGTATT	GGTTTACATG	GATCTGGAGG	120
ATTATGCACA	CTAGTGTGTA	GTTTCATTGC	AGGGACAAAA	TGGTCCCAAG	AAAAGATGAA	180
AGTCCAAAAG	ATTATTACGA	CTGTATGGGA	TATTTTTCAA	CCACTTCTTT	TTGGTTTAGT	240
TGGAGCAGAA	GTATCTGTTT	CATCGCTTGA	ATCAAATATT	GTTGGCATAT	CTGTTGCCAC	300
TCTAAGTTTG	GCATTATGTG	TTCGAATTTT	AACCACATAT	CTATTGATGT	GCTTTGCTGG	360
TTTTAGTTTT	AAGGAGAAAA	TATTTATTGC	TTTAGCATGC	ATGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC	TTCATGGCCT	AGGCACGGTA	CATACGATTA	TTATAAACAT	CAGCTGCGGT	60
TCTGGGAGTG	AGCTTGTGTC	GTGTTAGTGC	CATCTCCCTG	ACAAATCTGA	CCTGTACCCA	120
CATCTCAGGC	TGGGAAGGAG	TAGCTGGGCC	TCCCTTTAAT	GCAGCGGCAC	TGGTTTGGGT	180
CACAAGAGCT	GGTTTGATCA	ACCCCTGACT	CCCCCTGGCG	GGAGGTGCTC	GTCACATCTG	240
GGAGCCTGAG	CAGAGGTGCC	GGGGGCTTGG	AAGCTGGAGA	AATGATGGAT	CTTTCTCCAG	300
GAGAAACAAT	TCTTATCTTC	ACATCNGCCC	CGTGCTCCAA	ATGAAGAGCG	CGTTTGTCATA	360

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GAATTCGGCC	TTCATGGCCT	ACGCGCGGCC	GAGCGGAGGC	GGAGTCGGCG	CCGAGAACAT	60
GGCTGGAGGC	AAAGCTGGAA	AGGACAGTGG	GAAGGCCAAG	GCTAAGGCAG	TATCTCGCTC	120
ACAGAGAGCT	GGGCTACAGT	TTCCTGTGGG	CCGCATCCAC	AGACACTTGA	AGACTCGCAC	180
CACAAGCCAT	GGAAGGGTGG	GTGCCACTGC	TGCCGTGTAC	AGTGCTGCGA	TTCTGGAGTA	240
CCTCACTGCA	GAGGTGCTGG	AGCTGGCAGG	TAATGCTTCT	AAGGATCTCA	AAGTAAAGCG	300
TATCACTCCG	CGTCACTTGC	AGCTTGCAAT	CCGTGGTGAT	GAAGAGTTGG	ATTCTCTTAT	360
CAAGGCTACC	ATAGCTGGGG	GTGGTGTGAT	CCCTCACATC	CACAAATCTC	TGATTGAAAA	420
GAAGGGACAG	CAGAAACTG	CTTAGAGGGA	TGCTTTAACC	AACCTCTTCC	TTCCCGTCA	480
TTGTACTGTA	ACTGGGACCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

GAATTCGGCC	TTCATGGCCT	AAACAAGCAG	AGGGACTCCC	CAGATAGCTT	CATACCCAGT	60
TTAGCTTTAT	AACAAGTGTA	GTTTTAGGCT	CTGTCTTGGC	ATACTTGAGA	GCACAATGGC	120
TGCTTCAAAA	CAGGCATTG	AACTCGCTGT	TTAATCAAAT	TCTTCTTAA	TCTAAAGTGA	180
GTTTCTCATA	GAGAGCATAT	ACACTTAACC	CTTGAACAAT	GTAGGGGTTG	GGGTGGGGAG	240
TCAACCCCT	GTGAAGTAAA	AATTGCTAA	TAACTTTGA	CTCCCCCAGA	ACTTAACAT	300
AAATAGCCTA	CTATTGATTG	GAAGTGTTAC	CAACAGCATA	CACAGTTAAC	ATATATTTTG	360
TATGTAATAT	GTGTTATCCA	CTATATTCTT	ACAATAAAGT	TAGCAAAAGA	AAAAAATGTT	420
ATTAGGAATC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGGCC	TTCATGGCCT	ACATGAGCCC	AGGAGTTGAA	GGCTATAGCC	TGGGTGACAC	60
ACAAGGCCC	CATCTCTAAA	AAATATATAA	ATAAATAAAG	TTAAGGATGC	TGCGTGGTTT	120

```

ATATGTTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC 180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCAGCC GGAAGTAGGT 240
TTTTGAAGA GTCAGCTGAA AACAACGTGT GCCGTATTCT GAATTTAAAA TTTTAATTG 300
AAAATATTAT AACTGAGAAA TTATTGTATA TATTTATGGT ATACAGCGTG ATGTTATGAT 360
ACATGTATAC AATGCAGAAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA 420
CTATTTTGT GGTGAGAAAT TGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC 480
ATTATTATTA ACTGTTCTCG AG 502

```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA 60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA 120
GAATTTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG 180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA 240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACTCGA G 291

```

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTTCTGTAT TCTGTTGGTT GGAGTGTCTT ACTATTGTTG GGTGGAGTGT TCTATCTTCT 60
GTTGGGTGGA GTGTTCTGCT GTTGTGGGT GCGGTGTTGT ATATTCTGTT GTTGGGTGGC 120
GTGTTGTATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTTGTTGGG TGGATGGATT 180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTTCTATCT 240
TCTGTTGGGT GCGCATCTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG 300
GGTGGCTCGA G 311

```

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTTCATGGCC TAGTCTCATC TCAGAGTACT CAGAGAAACT ATTTTAAAT 60
CTCTAGATAT CAATCAATGA ATATTATTA TTAAATACCT GCTATGTGCC AGATGGTGTT 120

```

```

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATTT TGTCTATCA      180
TTAGGGAAGT GGCTCCNNNN CTTACAGCTA ATTTTTTTTT CAATTTACTA ATGACTTTTT      240
GTGGAGGTGG GGATCTCTTC TGTTCACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA      300
TTATTAAAAA ACAGTTGCAG TAAGTTCAGT CATAGGGGCA CTGGAATGAG TCCTTAAAC      360
TTTATGCTGC TGCTTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT      420
CTTGGTCACT GTATTTCCAA TCAACCATAT CCTCCCAGAA TATGATTTCT TCCCTCAGGC      480
ATTTTAGAAA AGAGACAAGA GACAGATTTT TTTTTCAGG CAATGACTCG AG              532

```

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTTTGTAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC      60
CCTGAGGGGC CCTACAGGCC CCCCCAGGTT CTGCCCCCAA GATTCTAAGA GAGACCTTGT      120
GCTAGGGCTC TAGTCTTGAT GTTCTTTGCA TTGTTTGGAT ATGAAGCCCA GGATATGTGG      180
GCACAATAAG GTAAATCATG AGATGTGAAG GAGAATGAAG ATCAGGCCAG AGGTCACCAT      240
TCATTGAAGA GCCAGAGAAA AAGAAAATTA GTGCACAGAT TTGTGTAGAT TTACAGAGAA      300
CTTCTATTTG CTGCAAGAAC TTCATCAGGC GCTGCACCAT GCCTGATTG GAAAGGAGCT      360
TCTTTGGGGC CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG          415

```

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT AGTAAAATTA GCTGAAAAAT AATTTTCCAA TGCAAATACT      60
AATGAGGGTT ATATGACCGT TGTCCAAAGC ATTTGCAGTG CTGCATGACA TTTGTCCTAA      120
AACCTGACTC TTA AACATT CCTTGTGAAA ATAGAAATAT TCCCATGCCT AGATTCCAAA      180
TAATAAAAGA CACTGAGAGT GTTTTCAAAA TTAATGGACT GATTTAAATT TCACTGGAAA      240
GCAGCTTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT      300
ACTGCCAACT TCTGGCGGCT CGAG          324

```

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCCCAGA GCCAGCAGCC ATTCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGGTCCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAAT CTCTTGAAAC TTCTTCCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCCTCT GAAAAGGGGC ACTATTCTCT TAATGTCCTT TAGTTTCTTA      600
ACTTCCTCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTTGTA CACTGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCATC      180
CTATTGCCCTG TTCTTTCTAA ATCTACATTT TGTTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCCTGTGA CCATTCCACC TCCTTGATC TTGGGCTTGG      360
GTTTGGAAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCA AGCAAAAGGG      420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTTCATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCA TGGTGCGATC TCGCTCATTG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCAGCT ACTTTTGTG TTTTATAGTAG AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA      60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC      120
TTTGTTCAG CCAGTTTAAG TAATCAGAAG GCTGGAAGT CTGCTGCTGG GCCAAGTGGG      180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAACA GGGCCATAAC      240
AGTCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC      300
AACATCAGTG GTGCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA      360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGCGAGCA ACGGGAAGAG AGAGAGATAT      420
ACTGAGAACC GGGAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA      60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGTACT CCCACCTCAG      120
CCTTGCGGAT CTCAGAGCTG CAGGATGGCT CTGCCCCACCG CACCCTGAGC TGGCCCCGCT      180
TGGGGCTGGC ATTGGGGGAC AGTGTGTCTT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCT      240
GTGCCTCTGC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC      300
CTGCGCCGAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC      360
ATGGGCACCT CTGCTCTTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC      60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACCT GCTCGACTGA GAGACTCAGG      120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA      180
GAAGCTATTG GAAAGAGAGA GGCAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA      240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AAACGGCAAG      300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGAAGAACA GCAGAGGAAA GAGAGAGAAG      360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA      420
G

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```
GGATTCTTTT GGAATGGGCA AAGAAGTGGG GAATCTGCTA CTGGAAACT CACAGCTTCT      60
GGAAACCAAA AACGCCTTGA ATGTGGTGAA GAATGACCTG ATTGCCAAGG TCGACCAGCT      120
GTCCGGGGAG CAGGAGGTGC TGAGGGGCGA GTTGGAGGCT GCTAAGCAGG CCAAAGTCAA      180
GCTGGAAGAC CGTATCAAGG AGCTGGAAGA GGAAGTGAAG AGAGTGAAGT CCGAGGCCAT      240
CATCGCCCGC CGTGAACCCA AAGTTCTCGA G              271
```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```
GCGGCTCTTT GGGAGGTGGT CAGGGGAAAA GATGGTCAGT GCTTTTCTG GACAAATCCA      60
GGGGCCAATT GAGGTGGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC GAGGGAAAGG      120
GCAGAGGACC TAGAATAAAA GGATATGGCC TCTCTGTGCA CTAGCAGGAT GGGTAGGAAA      180
GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCTG CAATCCCAGC      240
ACTCTGGGAG GCCAAGGCAG GCAGATCACC CGAAGTCAGG AGCTCGAG              288
```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```
GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT GAATTTGATA      60
GGCATACTGG AAGTGATAGA TCTTCTTTT CACATTACAG TGGCCTGAAG CACGAGGACA      120
AACGTGGAGG TAGCGGATCT CACAACTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC      180
CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAAATGTGA      240
CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA      300
ATGAAGTTGA AGAGGCTCTT CTCGAG              326
```

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTG CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGCTGTAC ATTACCCATT GATAATGTCT CAGTGGCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC      540
CTCGAG                                         546

```

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTAAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTACT TTTGTTTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT      180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTTGCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTTCT GTACTGTCCC TTATTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTTCCGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTCAAG CCATTTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC      480
ACCACGCCCG GCTAATTTTT TGTATTTTTA GTAGAGATGG GGTCTCTCCG TGTAGCCAG      540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAAA GTGCTGGGAT      600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTAAAGCAG TTCTCTTTTA      660
AAAAATTGTG GTAAGATATA AATCACAATA AATTTCAGT TATAACCATT TTAAGTATA      720
TAATTCCATG GCATTAATTA CAGTCACAGT CTTTACAAC TATTATTACT ATGTATTCTT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG                                         808

```

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G                                         361

```

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA    60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA    120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG    180
TATGTATTTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT    240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG    300
GAGAAGTTTC ACAGCTTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG    360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG    420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA    480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCCAG CTCCCGCCGG GCGACTCGAC    540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATTAT    600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTTGAGTGTG    660
GGCCTGGAGA TTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC    720
CAAGATCTAG TGTTTTGTAC TAGGAGAACT CTA AAAAGTA TCTATTTCAC TGTAAGTCCA    780
AAGTACAAAT TTATTGGAT TTATTTTGTG CCATCTTATT TTTTAATATA TTTCTTTTTC    840
TATGTTGTGC TTCTTTCCCA CCTCATCTCT CCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT    60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT    120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT    180
CTTCTCTCTT GGGGGGTAAG ACACTTGTG TTGAGCTCTG GGGATGATGG AGAACGACTC    240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGTTGG AAGAATCACA TTCGCTTCTC    300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC    360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCGGACC	TATGTGGCAA	GGAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AATTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAAAGT	GTTGAGCTT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCAGCA	TAATTCATCC	TGGAGCTACT	AATTCATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTTGTTCCT	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGCTCTATG	TTTTAGTGTG	TTTTAAGGAA	360
ACTAGTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTTGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAAA	GGCTGCCTTT	TCCTGTTTCA	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCTTGGTG	TATCCAGTGA	180
CTCACCGGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAAGCAG	360
CCAGAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCCTACAA	GTCCACTTAG	480
CCCCGACAA	CCCACTTCGA	CGCATCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTTATAG	TGAAAGATTC	AAATTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AATTCGAGGT	TACATCGTAG	GTTTTGATTT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TTAAGGTGGA	GAAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTAA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAAACTTTGT	GTTTGAAAAA	GTTTATTTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCTCTCTTT	TCCTTTCCCT	TTTTTAAAAA	120
ATTTTACCCT	GCCCTCTTTT	TTGCGTTTGT	TTTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAGAA	CTGAACCTCA	CATTCAGGTT	GTTTTTTTTT	TTGTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```

GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA      60
AAGGCGGTCTG TGTTATCGCT CCCAGGAAGG CGCGCGTCTGT GCAGCAGCAA AAGCTCAAGA      120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CCGCCACCTC CTCCAAGACA CCTTCCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG      348

```

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCCAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCCTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAATAAAAA AAAAGAAAAA AAAGGCCGGG TGCAGTGGTT      360
CGGCCTCCCA AAGTGGGGG ATTACAGGCG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTTGTTGG TAGTATTAA ATAACAAAAT      540
GTTCAAATAT TTGACAAGAT TAACAACAT ACACGGCCTT CTCGAG      586

```

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATT GCCTCAAGGA TTGAAATTTT TTTTCTTACT      120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA      180
TTCTTCAGAC TGGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTTCTGC TTACAAAACA      240
AATAGTAAAT ACTCTAAAAT AGGGGTTGGC AAACCTTTCT TAAATAAAAAG GCCAGATGGT      300
AACTATTTTA GGTGTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTTG TGGGCTACGT      360
ATGGGGTCAC TCTCCATT CTTCTCTCTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTC      420

```

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 586 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGG TCTCTGCTCA GCACCCAGC CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCGG      240
AAGAGAGGGG TGCCCTATCC CTGGCAACCC CTCCACGTAG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GCTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTCATT      360
TCTGCACAGG TACAATAGAT GACTTTATTT GTTTAAATG TTTAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TTAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCT TATTATTTTG CGTCGGATTC CTCGAG      586

```

(2) INFORMATION FOR SEQ ID NO:879:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 414 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAAATCAG      120
TAATTATTTT AAAATGAACA TATGAATTTT TATTAACTTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTTGTAAGT GGAATTAATA CAACCTGTCC TGTTTTGTCA GTTCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAAACGTGC TTGTCTCTGT ATACCCGAG AATGAAGTTA      360
CTGTTGTAA AACCGGATTT TTTCATTTTA CTAGGTTCCG CTCTCTCCCT CGAG      414

```

(2) INFORMATION FOR SEQ ID NO:880:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 402 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAAATT TATGTATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTTT TTTTACTT      120

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GTGTTTACAG	G TAGAATTCT	TTATTTAAAA	AGTCAGTTGA	ATATCAAAAC	TATTTGATAT	180
TCTTCAGACT	GGAATATTAT	TCTCTAGTGT	AGAAGAAAAC	ATTTTCTGCT	TACAAAACAA	240
ATAGTAAATA	CTCTAAAATA	GGGGTTGGCA	AACTTTTCTT	AAATAAAAGG	CCAGATGGTA	300
ACTATTTTAG	GTTTGTGGG	CCATGTGTTG	ATAACTATTT	TAGGTTTGT	GGGCTACGTA	360
TGGTGTCAAT	CTCCTATTCT	CTCTCTATCA	CCTACCCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	CTCGAAGCCA	AGAATTCGGC	ACGAGGGGCC	60
GTTTTTTTTT	TTTTTTTTTT	TTTTTTCNNG	NNAGGCTTTC	CCTAGGTGAT	TTTAAATTGC	120
TATTATAAAT	AAATATCCAT	TTTTCCCAT	AAATATTGCT	ATATGTTAGT	ATATTAATCT	180
TGTACTGTTA	CCTTTTTC	CTCTATTGGT	TCTGATAGCT	TGTCAGTTGT	CTACCTTTCA	240
TCTTCTAGGT	AAATATTTCT	TACAAATAAT	GAGATTTGCT	CCTACTTTCC	AATTTATCTC	300
ATTACTTTTA	CTNNTCTTAC	TGCACTGGCT	AGGACACCAC	TACCTTCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

TTTTTTTTTT	TTTTTAACCT	AAAAATAGTT	GTATTTATAT	TCCACAATTT	GTTCAAATAC	60
TGGTTTTTCT	ATAAACTTTC	TACAGGATGT	TTTTAAACAA	ATTCTTCACA	TTGTGTTTTG	120
ACTATGTACT	TGCGGAATTT	CAGGGAAATA	GTTCTGTGTA	TTTTTAATAG	CTTAATTGT	180
ACTAAAGGGA	TGGTAGGTGG	TCACATGCAG	TCCATGTGGG	ATTCTAACAT	GACATTTAGT	240
GAGTTTCTG	ATGTGGACCA	TCCCTTTGAT	GCTGAAGGTA	ATGCATCTGT	TGAAAGAAGT	300
GACTGTAGAT	TTGGATTACT	GCTCTCTGCA	TCTCCCTCTT	TTCTGCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

GAATTCGGCC	TTTCATGGCAA	GAAGGAGNCT	TAGCATCAAA	CTTTGGAAAG	GGAAGCCAGA	60
GAAAAAGGTA	GAATGGACAA	GTGACACTGT	GGACAATGAA	CACATGGGCC	GCCGTTTCATC	120
CAAATGCTGC	TGTATTTATG	AGAAAACTCG	GGCCTTTGGC	GAGAGCTCCA	CGGAAAGTGA	180

```

TGAGGAGGAA GAAGAGGGCT GTGGCATACA CACTGTGTAC GTGGCCACCG CAAAGGACGG 240
GTTNTGCAAC CCTAGGACCG ACCCCCACCA CCCTTCCCCA GTCCTTGACC NTTCCAGCC 300
CCCTCCAGGG CCAATGCAGC ACTAAATCCC TCTCTCCTCC AGCATTCTTG TGTCTGTCTG 360
GCCCTAAATG TATCCATGTG GCTACTTCTC CAGCCCCCTC CTTCCTNTC TTCTGCCTGA 420
TAGAGGGAAG AGGAAGAGGA GGACGAACAG AGATCCTGAA ATTCTGACTT GCTGCTATTC 480
CAGAACCCAG CCTCCTGGGT TTCCCAGTC CTCATTTTTC CTCCAATAC CCACCCTTCT 540
CTCTCGAG 548

```

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC TTCATGGCCT AAAAAATACA AAAAATTAGC CGGGCGTGTT GGCGGGCGCC 60
TGTAAGTCCCA GCTACTTGGG AGGCTGAGGC AGGAGAATGG CATGAACCTG GGAGGCGGAG 120
CTTGCACTGA GCCGAGATCG CGCCACTGCA CTCCAACCTG GGAGACACAG CGAGACTCCG 180
TCTCCNAAAA AAAAAAAAAA AAAAAACAC ACTTGTCTTA CAAAGACTAA CAAAGATAC 240
AAAATAAAAT AACTTTACAG CATCATTAGA AAGCGAACAA AATCCTAAGA TAGATACATT 300
TATCTTTCTT GTTTTAGAAC TTTTCTGTG TAATGGAATG GAAATGCTTA ATCTTGTTC 360
AATGTTTCA GTGTTGTGC TTTGTCAAAT TGAGGTTGGA TGTTAAAGCC CTTACTACTG 420
TATTATACAA AGCAGCGAAC CTCGAG 446

```

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC TTCATGGCCT AGCCGGCGCC GCCGNGTCTT CCCGGTCTCC TTTCCCGGCC 60
GCACAGGGTT TTATAGGATC ACATTGACAA AAGTACCATG GAGTTTTATG AGTCAGCATA 120
TTTTATTGTT CTTATTCCTT CAATAGTTAT TACAGTAATT TTCCTCTTCT TCTGGCTTTT 180
CATGAAAGAA ACATTATATG ATGAAGTTCT TGCAAACAG AAAAGAGAAC AAAAGCTTAT 240
TCCTACCAAA ACAGATAAAA AGAAAGCAGA AAAGAAAAAG AATAAAAAGA AAGAAATCCA 300
GAATGGAAC CTCCATGAAT CCGACTCTGA GAGTGACCT CGAG 344

```

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:


```

GAATTCGGCC TTCATGGCCT AAAAATCTAA ATTAAGTAT GAATAATTTA AAACAGAATT      60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATT GCACGAACCT      120
TTTAGCTAAA ATTTGTTTCA AAGAAGTTGC TTTTGTTTTT AGTGACCTT GAGTTCAACA      180
CAGATGTGAA TGCCCGCTTT TTCCAGAAGG GTTCTTGGGA GAAAACACTG GAGAAGTTCT      240
AAGCACTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTTCT TAÇTCTGTTG      300
TTCAGGCTGG AGTGCACTGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA      360
AGTGATACCC CTGTCTCAGC CTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GCCCCAGTCT AAGGCATTTA AAATTAAACA GCTCTTCAAC GCCCCAAGTT ATTTTCATCAG      60
GCTAAGAACT TCTCCGAGAA ACGCACAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG      120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC      180
GTTAAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAACTAGT      240
ATGACCGGAG GCTCAATTTA GAAGATGCAG CATCTGAAAA CCTTACCCC AGGAAAGGAG      300
GGGTGCCTGC TGGCATTTCAT GGGCTCTGGA ACAAGCATTT ATTCAAAGCT GATGGCCCTC      360
CGAG

```

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GCACCCCAAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATTT      60
CTGGTCTTTG TCCAACAGGA AACCATTTC TGGTGGGATA TGCCTTCCAG TGCCACAGGG      120
CCACTCACCC CATGCATCTC TGTCTGCCC GTCAGTGCTG GGACGGACAG CAAGGGCAAG      180
CCCAGTGTCT GCGCGATAGG TGGGTGGGAA CAGAGAGGGG AGAATGCCGT CCTAAGCTTC      240
TGCTTGGGGA TCCCCACAC GACCTGGGTA CTGCCTGGGA AACCTGTCCT AAGTAAAACT      300
ATGGACCTCG CCTCGCCAC CCGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG      360
CGCCTTTGTC CTCATTTTGA GCTGCAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GTAGGCCATG AAGGCCGAAT GGAAAAAGTC AGTTAAAGAG GACTCAGTCC CCACAGGTGC      60
GGAGGAGAAT GTGGTGTGTG AGTCACCAGT AGAGATTATA AAGTCCAAGG AAGTAGAATC      120
AGCCTTACAA ACAGTGGACC TCAACGAAGG AGATGCTGCA CCTGAACCCA CAGAAGCGAA      180
ACTCAAAAGA GAAGAAAGCA AACCAGAAGC CTCTCTGATG GCGTTTCTCA GACAAATGAC      240
ATCAGACTCC ACAGAAAAGA CTATCACACC GCCAGAGCCT GAACCAACAG GAGCACCACA      300
GAAGGGTAAA GAGGGCTCCT CGAAGGACAA GAAGTCAGCA GCTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGGATGCT CTGGGTTTGC TGTAGTCGTC      60
TGTTACTGGT CNTGTTAGGA GGAGGGCCAG GGGGACCCCC ACCTGGGGCA GTCCCTTCTG      120
TCCCTTCAGC AGGTGGCTGA GCTGGAGCAG ACATTITTCT GACAGAGAGA GTGAGGGTCT      180
GTTCTCTCCT GGAGGCTGCG GCGAGACACC CGGCGAGGGA CGCTGCGCT GAAGTGGACG      240
GAAGTGCCAA GCTCCGCCTC GCGCGACTA CCCC GCGGTC TAGCTGCGCT GGGGTTTCAC      300
CATGTTGGCC AGGATGGTCT CGATCTCTTG ACCTTGATGAT CTGCTGCCT CGGCCTCCCA      360
AAGTGCTGGA ATTACAGGTA TGAGCCACTG TGCCTGACAC CTGTCAAATT ATTTTACTGT      420
GTTTATTAC CATGTTTCTT TCACTGTGGG GTCTCTGTCC TTGCTGTTT GTTTTCTTT      480
TAACTTCTTT TGTTATTAG GAAGGTTTAT ATTAATATTT TAATTCTACA TTGGATAATT      540
CCTATATCAA AACTATTGTT GACAATCAGT TACAGATGGA ACTTCGTCTA CTCCTTCTCC      600
CCTTCTCACT CCTGCTCTTT CTCCCTTTCT CACTCCAGCA GTTGACTAGT CTCATTGAAA      660
AAACAAATG GGGCCGGCCA GGCATGATGG CTCATGCCTG TAATCCGAGA CAACTCGAG      719

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC TTCATGGCCT AGATACTCCG CTGAAGATCT GATGTCACCC CAAATGCATG      60
GCTCCAGCCT CAGTTCAGCT TTCCACACTG CTTGCAGAAA TTCCTTCATT TATCTTGAGT      120
TTCTCCTCTC ACTCCCATGG TAGCTTTTCC ATTCCCACTG CCTCTTCTCA CATTTTCAGTA      180
GATGAGAATA GAAGCCATAG GAAGCAAACCT TCCTCAACCT CCAGCCAACC GCCGAGCGAT      240
GGGCATCTCT CGGGACAACCT GGCACAAGCG CCGCAAAACC GGGGGCAAGA GAAAGCCCTA      300
CCACAAGAAG CGGAAGTATG AGTTGGGGCG CCCAGCTGCC AACACCAAGA TTGGCCCCCG      360
CCGCATCCAC ACAGTCCGTG TGCGGGGAGG TAACAAGAAA TACCGTGCCC TGAGGTTGGA      420
CGTGGGGAAT TTCTCTGGG GCTCAGACTC GAG      453

```

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCCGT	60
CCACCCAGGA	CCCCTCCACC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGGTC	AGGGACAGAG	CCCAGGCCA	GAGAACTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCGTGCCAG	CGCACACGGA	TGCCTTCCAG	GACTGGGGGC	240
CTGGCAGCAT	GGCCACGTC	TCTGTGGTCC	CTGTCTCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGGAAGA	AGCAACCAAG	AATGTCGAGG	TCTTGGCGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCAGGC	GGGGAAGTAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAAGCTGC	180
AGGGAAGAAG	CGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGGCGA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGA	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTGTC	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACTG	GAGGCTGCTC	AGGGAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAAGCAGTT	GTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCTCC	CATCTGAAC	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCAG	TCTTGATTCC	TGTGATCACT	CTTGCATCAC	120
TAATTGCACA	AGTGATTTC	GGTGCAATTC	TGATTAGCCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAA	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAGC	240
CATTCTTTGT	TAGCAGTGTA	AGAACCTTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTTGC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCGCA TATGTGATGA GTGTAACATG GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATTN NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTTATC TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA      240
CTTTTTTCCA AAAGAAGTCT ATTAATGCCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTGAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                   473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATTGTGGTT TGGGTTTTAA TTTTATAATA TTTTAATTTT      60
TAAAATCAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTCAGC GGGTATGGTG GCAGGCACCC      240
GTAATCCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCAGC TCACTGCACT CCAGCCTGAG AGGAGACCCC TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTACTGTTTT      480
CATTTAACTT TCTCTGTTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAAGATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACTAC CGAG                   594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```
GAATTCGGCC TTCATGGCCT ACTGTACATT TTTTAAAG TTTGTTGAAA AGAATATTGT      60
CTTATTCTAT AAAACATTTC AAACCTAGTT AGAGATTTGT AATCAAAAAA CATTGCGCA      120
GAAAGCAGCA CTTAGGGCTG CCTGTTCTAT ACCCTACAGT CAGACAGGAA AAGAACTGAA      180
AATGGCACCC TTCTGACATT CTGAGGCAGC TGGACTGGCA GCCAAGTAAA GGAGAGTGAT      240
GAGGTGGTGT GGGGAGGGTG GGGAGGCAGC GCGAGGGTGC TCTCCACAGG GTAGGTCTCG      300
AG                                                                                   302
```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```
GCGGCCTTCA TGGCCTAGTG CTTGTCAGTT TGGAAAGTCA CAGGGAGTTT ACCATTCTAT      60
AATTAGAGTA GGAGGAAAAT GAGAACCAC TGGTAGAAGA AGAAGCAACA GTCTTCTAGG      120
GTCTGGCATT TGATGAGATA GGTATTCAGT TACTGTGCAT TTCCATTGTT TTTCCATGGC      180
AGAACATACG GCAGAGATTG GGGAAGTCGC ATGCCTGAAG CCAGGTATT CTTATGTTCT      240
GTAAGTATGT TGCTCGCAGG GCTGTTGTTG TCAGAGTAGT GAGTTGTGCC CCAGACAAAT      300
GGGGTGCTGG TCTGCTCCCA CAAATCTTTA TCCAGTCTT CATCGCAAGG AGGGCACTGC      360
CAAGTGCTCT CAGCCAGAGT CTCTTGCTA AGGCTCCTGG TTTGGTTGAC AACATCTTGC      420
TCAATACAAC TTCTGTCATC ACAGCTTGAG ATATGATGAC TAATTTACAG TCGAG          475
```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```
GAATTCGGCC TTCATGGCCT ACAGCTGCCT TTTCTTTAA AGGGGTCTT GTCTTCTGGA      60
ATTCCCTTTA CTAGAGGATC CTCTCCAGAA CGTTCTTCAA TATAGTTCTT TATTCTTCA      120
GAACATTTAG ACACCTGTTG TCTCTGCAAC TTCCTTCTT TGCGAAGCTG CTCACCTTCC      180
ATTTTCAGTT TTTCTTCTC TGGCAAATCT TCGATGTGAA GGGCAGGCAT TTTGCCCCCA      240
GAACCGGGCT CAGGCTAGCT CTGGCAGCGG AGCCGCTGGA AGAGCGGCGA AGCTCGGCGC      300
GTCCCGAAAC AACTGAAGGC CTGGCCCCGC GCCCACCCGC GCAGGATGTG ACTGCAGCCC      360
TGCTGCGGTC CCCAGCTCCC CGAGGGCTTG GCTTTCTCCG GGACGCTTGT CACGCCAGCG      420
TGCCCCAGCT TCCTAGGACC TGAGAACTCT GCCTTTTCTC AAGTCCCTGC AACCCAGGAG      480
GCCTGCCCGG GTGCTAGTAG GCCATGA                                                                                   507
```

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT      60
TATTCCTGGCC CCTGCAAATT TTTCAGTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN      120
GAGTTCCTGG GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT      180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAC      240
AAACCTTCCT CTTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC      300
ATTGGAAGC ACCAGGACCC AGGTGTTTGG ACTCAGCCTC ATTCAGACT GAGATCTGAG      360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA      420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCTCAT CCACTTCAGC GATTGAATC      480
TTTACCGGCC TCGAG                                         495

```

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC AAAGAGGCCT AGAATTCCAG ACCTAGCTCA ACCCATGCCT CCTTTCCTTC      60
CTTCCCTCCT TCCTTCTTTT CTTTTCTCTT TTCTCCTTCC CTCCTTCTC CCTTCTTCC      120
TTCTCTCCTT CTTTCTCTTT CTCCCTTCTT CTGCTCTTC CTTCTCTCT CCCTCCCTCC      180
CCTCCCTTCT TTCCTTTCCT CCCTCCCTTC CATTCTTTC TCCCCCACC CCCGTTTCTT      240
CTCTTTGGAG AGATGTACAG CTCGAG                                         266

```

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCTT TATAAAAACA      60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGGAACCACC CCATGATTCA      120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAACCT CAACTCAAGA      180
TGAGATTGGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCATT AGTTTGATA      240
TCATCCTTGG CTCCTTTAGC ACTATAAGGG CAGGATTGAG TCCTTGCAAC AGAAACCATT      300
CAGCCTGCAA AGCTGAACCT ATTTACTTTC TGACCCTTTA TGGAAAAGTT TACTGATCTC      360
TGGACTAGAC AGTTTTTTAA AAATGACATC TTATGACCGG GATTCTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT      60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT      120
AAGGTCACAC AAGCTTGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG      180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGGTGG ACTGATCATC      240
AGCATTTACA GGTTTGGAAT TGAATTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG      300
CAGATTTAAA CGGAAGGACA CTCGAG      326

```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC      60
CCCTACAAGG CCTCACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT      120
AATGTGTATG CTCGCAAGA GAGCTTGCTC ATACCTTGAT TATTTCTATA AATCACATGT      180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT      240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTGTCTGT TATCTCCTTA CTTAGTTTAA      300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTGCAAT TTTAAAAATA TTTGGGACTG      360
GGCATGGTCG CTCACGCCTG TAATCCAGC ACTTTGGGAG GCATCTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCAGCG ATTCTCCTGC CTCAGCCTTT      60
TGAGTGGCTG GGAATACAGG TGGATGCCTC CATGCCTGGC TAATTTTTTG TATTTTAGTG      120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA      180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTGAGG      240
TACAGTTTGT AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT      300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT      360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG      420
ATTGACAAAG GTCTCTCCTC ATCCCAAAA TAAATAACAT TTTTTCATT ATAATAGTAA      480
TACACCAGTC GACTCGAG      498

```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AAAGTGGTGC TGGTTTCACA TCACGACAGC AACGGGATTG      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCCTTT CTGGGGTTTC TTGGCTGCTT GGTCAATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCAGC TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT C1CTGTTTGT GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCACCTG CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCACCTGGA CGGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCCTTGTCT GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTCATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:


```

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC      60
AATTGCGAAG ATGAAGGCTC TGTGGGCGGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT      120
AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG                                157

```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTGTGA ATTATGGCCT GGATTTCACT      60
TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTCC CAGGCTGTTG TGA CT CAGGA      120
ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTGCT CAAGTACTGG      180
GGCTGTTACA ACTAGTA ACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTAC      240
TGGTCTAATA GGTGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC      300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT      360
ATATTTCTGT GCTCTATGTT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACTGAC      420
TGTCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCTG TTTCCACCTT CCTCTGAAGA      480
GCTCGAG                                487

```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```

GAATTCGCGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA      60
TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA      120
GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCTGCA AGGCTTCTGG      180
CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA      240
GTGGATTGGA ATGATTATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG      300
CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT      360
GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC      420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCAAAA CGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

```

GAATTCGCGG CCGCGTCGAC CCAGGATGCC GCGCAGCAGA GCTCTGATTC TGGGGGTCCT      60
CGCCCTGACC ACCATGCTCA GCCTCTGTGG AGGTGAAGAC GACATTGAGG CCGACCACGT      120
AGGCACCTAT GGTATAAGTG TATATCAGTC TCCTGGAGAC ATTGGCCAGT ACACATTGTA      180
ATTTGATGGT GATGAGTTGT TCTATGTGGA CTTGGATAAG AAGGAGACTG TCTGGATGCT      240
TCCTGAGTTT GGCCAATTGG CAAGCTTTGA CCCCCAAGGT GGA CTGCAAAA ACATAGCTGT      300
AGTAAAACAC AACTTGGGAG TCTTGACTAA GAGGTCAAAT TCCACCCAG CTACCAATGA      360
GGCTCCTCAA GCGACTGTGT TCCCAAGTC CCCTGTGCTG CTGGGTCAGC CCAACACCCT      420
CATCATGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

```

GAATTCGCGG CCGCGTCGAC GCAAGATGGA TTCACAGGCC CAGGTTCTTA TATTGCTGCT      60
GCTATGGGTA TCTGGTACCT GTGGGGACAT TGTGATGTCA CAGTCTCCAT CCTCCCTGGC      120
TGTGTCAGCA GGAGAGAAG

```

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

```

GAATTCGCGG CCGCGTCGAC ATCATGGCTA CCCTGCGTGT CCCACTCCTG GTGGCTCTCG      60
TCCTTCTTGC TGTGGCAATT CAGACCTCTG ATGCAGGTCC CTATGGTGCC AATGTGGAAG      120
ACAGTATCTG CTGCCAGGAC TACATCCGTC ACCCTCTGCC ATCAGC

```

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGCGG CCGCGTCGAC TTCTTGGGCA GCACAGAAGA CAGAGCCGAT TTTGACCAAG      60
CTATGTTCCC TGTGATGGAG ACCTTCGAAA TCAATGATCC AGTGCCCAAG AAGAGAAATG      120
GGGGGACCTT CTGCATGGCA GTCATGGCCA TCCACCTGAT CCTGCTCAGC GCAGGTACTG      180
CACTGCTGCT GATTCAAGTT CTCAATCTGC AGGAGCAGCT CCAGATGCTA GAGATGTGCT      240
GTGGCAATGG ATCACTAGCT ATCGAGGACA AGCCCTTCTT CTCGCTGCAG TGGGCACCCA      300
AAACACACCT GGTACCTAGA GCACAGGGGC TGCAAGCCTT GCAGGCCAG CTCAGCTGGG      360

```

```

TCCATACCAG CCAGGAGCAA CTCCGTCAGC AGTTCAACAA CCTCACTCAA AATCCAGAGT   420
TGTTCCAGAT TAAAGGTGAA CGAGGCTCTC CAGGTCCAAA AGGGGCCCCG GGTGCTCCTG   480
GAATCCCGCG GCTGCCTGGG CCAGCTGCTG AGAAGGGAGA AAAGGGGGCT GCAGGTCGTG   540
ATGGAACCCC AGGTGTCCAA GGACCCAGG GCCCACCAGG AAAACTCGAG   590

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGCGG CCGCGTCGAC GGAAGAGCAA TGAAAACATA TGCTCCTACA TTATTCATGT   60
TTCTATGGCT GCAGCTGGAT GGGATGAGCC AAGGTGAGCA GGTGGAGCAG CTTCTCTCCA   120
TCCTGAGAGT CCAGGAGGGA TCCNGTGCCA GCATCAACTG CACTTATGAG AACAGTGCCT   180
CCAACTACTT CCCTTGGTAT AAGCAAGAAC CTGGAGAGAA TCCTAAGCTC ATCATTGACA   240
TTCGTTCAAA TATGGAAAGA AAGCAGACCC AAGGACTCAT CGTTTTACTG GATAAGAAAG   300
CCAAACGTTT TCCCTGCACA TCACAGACAC CCAGCCTGGA GACTCAGCCA TGTAATTCTG   360
TGCTGCAAGT GAGAGCACCA ATACAGGCAA ATTAACCTT GGGGATGGA CCGTGCTCAC   420
AGTGAAGCCA AACATCCAGA ACCCAGAACC TGCTGTGTAC CAGTTAAAAG ATCCTCGGTC   480
TCAGGACAGC ACCCTCTGCC TGTTCACCGA CTTTGACTCC CAAATCAATG TGCCGAAAC   540
CATGGAATCT GGAACGTTCA TCACTGACAA AACTGTGCTG GACAATCTCG AG   592

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGCGG CCGCGTCGAC GAATGAGGTG CTCTCTTCAG TTCCTGGGGG TGCTTATGTT   60
CTGGATCTCT GGAGTCAGTG GGGATATTGT GATAACCCAG GATGAACTCT CCAATCCTGT   120
CACTTCTGGA GAATCAGTTT CCATCTCCTG CAGGTCTAGT AAGAGC   166

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

```

GAATTCGCGG CCGCGTCGAC GTCTGAGAGG AACCCCTTCTC TGAGGATGGA CACTTCTCAC   60
ACTACAAAGT CCTGTTTGCT GATTCTTCTT GTGGCCCTAC TGTGTGCAGA AAGAGCTCAG   120
GGACTGGAGT GTTACCAAGT CTATGGAGTC CCATTGAGA CTTCTTGCCC ATCAATTACC   180

```

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTG GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTG GGGAACAGTG	120
TGGGTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC	AAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTTGCACAG	GATAGAAATC	60
CCATTCAAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TGGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCTG	180
ACCCACTGGT	ACCAGGTGCG	GTGCCTGTTC	CAGTCACCAC	TGTTCGCCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AACAAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCCAAG	TGGACCAAGC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	GAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AACGCCCTCA	CCCCCACCAG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAACA	TGTGGAACAC	GGGCAGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTCATG	GATCATAGCT	CCAGAAGTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATTT	TCTTTACTCT	CTTGTCAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	GGAAGGAAGG	CAAGAGCAGA	240
CTTGTCGGAT	GAATTTTATT	TTCTCTATGA	AGTTTGAGAA	TTAAACTTTA	TGCTGAGAAG	300
GAGGGCAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGGG	TAACCAATGT	AAGTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAAA	AATATTTAAA	ATTTGTATC	CACTGAAAAT	420
TCTTCAACAG	TGTAAAATGA	AGCATGCTCA	ACTGGAAATG	GTCATATATC	TAAAAGAAAA	480
TGGATTATAT	TTGTTATTTT	TCTCTATATT	TGTAGTATTT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGTGTC	TTTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTTTCATG	600
CTTGTTTTTA	ATTGTTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTTGA	TGTGGTGATG	660
TGTGTGATTC	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTCCTCG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTAGTCATTT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTAGATAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTACTCACAG ACAGGCAGCA AGGGACTCGA G              651
```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAAAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAAGATTT GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAAATAT TCCTCAATTC TACCTAATGA TGTACAAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAATTT GATCCCCAAA GACAGGAAAT TCTAGTAAAA TTACTAGATG TGCCTACTGG      540
TGATTGTCAT ATTTCTCCAA AGAATGTGAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCTCA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG              700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAATCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180
```

CCTCTACCTC	ACTGTGATCT	TCGACCTGGC	GACACAGGAC	AGCCACACAG	AAGCACGCCA	240
ACACACTTAA	AGCTTTGCTC	CAACTAAATC	ATTTAGTTTC	CCTTGAAGAA	ATAACTGAAA	300
AAAAAACA	CTGCTGACAT	CTATGTCTGT	AGCTCGATT	TACAGTCTGC	TCTTTGTGAG	360
AAAGGAAAT	CACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC	AAAGAGGCCT	AATATTTTAC	ATTCTCTTT	TCTAAAAGTG	TAAATTTTTC	60
ACTTTAAAT	GAAGCAAGAA	TAAATAAAT	AGAACAATA	CCATATATCA	TCACAGAGTC	120
AATATATTAT	GGTCCTGTTC	TGACCAAGTG	TTGCATTGTA	TTTGTGTAC	CAGAACTGCA	180
GGGCTTTCTA	TGGCTACATG	GTCAGTGCAT	GCTCAGACAG	CTGTTAAAAT	CAAAACCTTC	240
ACTGTGCTGG	GTCACCTGGT	AACTACTGTC	TATCTCACAA	GTGCATTCTG	CTGACATTCA	300
AGGGTTAAAC	TGGTTTCTAG	TAAATACTGT	GCTTTAAAGT	AGTACATACT	GTGAGCTGTG	360
TTATTAGAAA	CCTGCTTGTC	CTTGTGTCTG	AAAATAAGGA	GGAACACTCT	CGCACCAAAT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	AAAGAGGCCT	AGGTAAATGT	TAGTGGAATA	TTTTATGAGT	ATATGCTGAA	60
AGGAGAGATT	AGTTCACATG	AACTCAATA	TGTTCAAGAT	AATGAAATGC	TTAGAAAGGT	120
TACTTTTGAT	CCAGAAGTAT	TTTTCAACAT	ATTACTTCTC	CCTATCATAT	TTTATGCAGG	180
TTATAGCCTG	AAAAGGAGAC	ATTTTCTTCG	AAATCTTGGG	TCTATCCTAG	CATACGCITT	240
TCTTGGAACA	GCAATTTCTT	GTTTCGTTAT	TGGGTCAATA	ATGTATGGCT	GTGTAACGCT	300
GATGAAGGTA	ACGGGACAAC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GAATTCGGCC	AAAGAGGCCT	ATGGACACCC	TGTGCCCCAA	GCCGATGGCC	CCACCCAGCA	60
GCATCAGCAC	AGNTGCCCCC	CTTCTCCGCA	GAGCAGGCTC	TCCTTTACGG	GACTCTCCTC	120

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TTCCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT    180
GCACTCGCTG CCTGGTGGCC TCATCCCACC CCAAGACCAC TGCCTGATG GCTCCAACCC    240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATTGCATCC ATGCAGAGAC    300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGGT    360
GTCCTGTCTG AGAAAACTGT GACACCATCA ACCCAACTAA CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

```

GAATTCGGCC TCATGGCCTA CCAGACTGTA AACATTCCAG GTCCTGAAAA AGTGTGGGAC    60
CAGTCTCCTA CTGTTATGTT CTCCAGTTTT AAAAATGTAA AATCAGTTGA AACACTCGAT    120
CAGAAGGCAG ATGAAGTCCT TGACTGTCAG AGTAACCAAA ACAGACCAGA TGAATGCAAA    180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCACCGGA    240
CTCGAG                      246

```

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```

GAATTCGGCC TTCATGGCCT ACTCCATTGT CACGCCAATT TCCCCTAGTC CAAGTTTTTT    60
CTTTGCTGAT TCCTTTGTCC ATGTGTGCTT TGAGCCTCTC TCATCTTGTC TTTCTCCTT    120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCAGT GGCAGCAGCA TCAACAGGGC    180
TCTGCCCCCTC CTACCCCACT GCCCCCATCA CCACCACAGC CTGTGACCCT GGGGGCTGTG    240
CCAGCTCCAC AGGCTCCACC CCCGCCCCAC AACTCGAG                      278

```

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```

GAATTCGGCC TTCATGGCCT ACGAGTGCAG CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA    60
GAGCATTCAC TACCTCTACT TCTCCATGAT CCTGTCCACG GTCACCCTCA TCACTGTCTC    120
CACCGTGAGC TGTTTCACAG AGCCACCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT    180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACCA CCAGCAGCTC CCTTGTCTCT    240
TACCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTTCGAGAT    300

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GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGCTCCCGGC 420
 C 421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
 AGACACCTGC TGACCCAAAA CTGAAACTC TAAGTCAAAC CAAAAAAAC AAAGGATCTG 180
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
 GTCATTCTTC AGTTAAGGAA CAAAACCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420
 GTGAACTCA TGGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTTTGAC TATCTATAGA TATTAGTTGG 60
 CATTCTACTG TAAGGAAAAC TTTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120
 AGTCATTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTGTGTTTGA GTTCATTTTG 180
 AAGTTCATTT GAAGTTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
 TATTTATCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTCTCTCT 360
 CTTTCTCCT TGTAGGACTT CATTCACAAG GATGTAGAA CTTTTTACCA TGGCTCTCGA 420
 G 421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

```

ATAGAAATGT CATAATTTCT CCTTTATTCT TGAATGATAG TTTTGTGGGA TATAGACTTG      120
CTGGATATAG AATTACTGGA TATAGAATTG CCAGATATAA AATTCTTGGT TCAAAGTTTT      180
TTTTCITTGA GGACTTTGAA TGTCATCCA CTGTCTTCTG GCCTCCATAG TTTCTCATAA      240
TAAATCAGCT GTTAATCTTC ATTAAGTTTC CTCTGTACAC GAAGAGTCAC TTGTCTCTTG      300
CTGCTTTCAA ATTTTCTCA TTGCTTTGG GTTTTCACAC TTTAATTATA TGCCTTTCTA      360
TGTGGATCTC TTTGAGTTTA TCCTGCTTGG AGTTCATTGA GCTTTTGGCA TCTGTATATT      420
AATTTCTTTC ATCAGATTG GAGATGTTT TGGCATTAT TTCCTCAAAG TTCTTTCTGC      480
TTCTTTCTCT CCTTCTCCTT CTGGGTCACC ACAATGCATA TGTTGGTCTA CTTGATGATG      540
TCTCACAGGT TCCTTAGACT CTGTTTACTT TTCTTCATAT TTTTCTCTT CTGTTTCTTA      600
AATTTGGATA ATTTTGGTGG TCTTATATTC AAGTTTGCTG ATCTCGAG      648

```

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

```

GAATTCGGCC AAAGAGGCCT AGAGGATGGG AAGCTTGGGG AGAGAAGATA CTGAAATGCT      60
AGAAACTGAG CCAGTAGAGG ATGGGAAGCT TGGGGAGAGA GGACATGAGG AAGGATTCTCT      120
GAACAACAGT GGGGAGTTCC TCTTAAACAA GCAGCTCGAG      160

```

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

```

GAATTCGGCC AAAGAGGCCT AGAAAACTC AGGAAAGAAA TTGCAGACTT CGAACAACAG      60
AAAGCAAAAG AATTAGCTCG AATAGAAGAG TTAAAAAGG AGGAGATGAG GAAGCTACAA      120
AAGGAACGTA AAGTTTTTGA AAAGTATACT ACAGCTGCAA GAACTTTTCC AGATAAAAAG      180
GAACGTGAAG AAATACAGAC TTAAAAACAG CAAATAGCAG ATTTACGGGA AGATTTGAAA      240
AGAAAGGAGA CCAAATGGTC AAGTACACAC AGCCGTCTCA GAAGCCAGAT ACAAATGTTA      300
GTCAGAGAGA ACACAGACCT CCGGAAGAA ATAAAAGTGA TGGAAAGATT CCGACTGGAT      360
GCCTGGAAGA GAGCAGAAGC CATAGAGAGC AGCCTCGAG      399

```

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGGC	AAAGAGGCTA	GAAGCATCGA	AAGCGTTGGA	GAGGTGTTAC	CGGTAACGGC	60
GGCGAGAAGG	GTGTTCCCGA	ACTAGAGTGG	GGCATACATA	ATCTTGCTGC	TATGCTTCGA	120
AGCTGTAGTC	TGAATCAACC	TAAGTTTTAA	ACAGAAGGTG	AACCTCTGAG	ATAGAAAATC	180
AAGTATATTT	TAAAAGAAGG	GATGTGGGAT	CAAGGAGGAC	AGCCTTGGCA	GCAGTGGCCC	240
TTGAACCAGC	AACAATGGAT	GCAGTCATTC	CAGCACCAAC	AGGATCCAAG	CCAGATTGAT	300
TGGGCTGCAT	TGGCCCAAGC	TTGGATTGCC	CAAAGAGAAG	CTTCAGGACA	GCAAAGCATG	360
GTAGAACAAAC	CACCAGGAAT	GATGCCAAAT	GGACAAGATA	TGTCTACAAT	GGAATCTGGT	420
CCAAACAATC	ATGGGAATTT	CCAAGGGGAT	TCAAACCTCA	ACAGAATGTG	GCAACCAGAA	480
TGGGGATGC	ATCAGCAACC	CCCACACCCC	CCCCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	AAAGAGGCCT	AAGAAATTAT	ACCATTTTAT	GGAATGTCAA	GCTACATCAC	60
CCGAGAAGAC	CAGTACAGCA	AGCCTCCGCA	CAAAAACTG	AAAGACCGCC	AGATCGATCG	120
CCAGAACCGC	CTCAACAGCC	CTCCTTCTTC	TATCTACAAA	AGCAGCTGCA	CAACAGTATA	180
CAATGGCTAT	GGGAAGGGCC	ATAGTGGTGG	AAGTGGCGGA	GGCGGCAGCG	GTAGTGGTCC	240
CGGAATTAAG	AAAACAGAAG	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	AAAGAGGCCT	AAGCCTCGCC	TTACACTTAA	GTGCACCCGA	TCCTGCCTCT	60
GGCATCTCAC	AAACGTCACT	CCCTGGAACA	AATTTGTGAA	GGCCTCCAGA	CCACAGTGTC	120
CTCATCTGTA	AAATGGGGGT	AGTAGTAATC	CTTGCCTCAT	AAAGTCTTG	GCAAGGATTA	180
GATGAGCGAG	CATGTGAGTT	TGGCCTCCGT	TAAACACTC	CATAAAGTTT	CCTTTTAGGA	240
TAACAGCAGG	CCGTTTTAGA	ACCTTCCAGA	GGTACTTAT	TCAGATATCC	TTAGGTGACG	300
ATTGGGAAGC	TGCCGTTTCT	TGAGAGCCTC	CTGGGTGACA	GATGGAGAGT	GGCCCTGGCG	360
TGACCCTTGA	CCCTATCCTT	GAGGCTTTC	TGCCCGTCTC	CTGCCTCGAA	TGTGCTCCGC	420
AGCACATGGA	TCAGGATGGG	GAAGGGGCTG	TGTCACTGGA	TACCTTCGGC	CCCTGCCAC	480
GTCTAGGGCC	TGTGAAAACG	AGGAGGGACA	GCAAAGAAAT	GGGGAAGGC	TCGAG	535

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	AAAGAGGCCT	AAAATTGTTA	ATTCTAGTCA	CCCTGCAGTG	CTATAGAACA	60
CTGGAAGTTA	TTCTCCTAT	ATCACCGTAT	TTTTGTATCT	ATTAACAAAC	CTCTCCATAT	120
CCTCCCTCCC	TCCTACCTT	CCCAACCTTT	GGTAATCACT	ATTCTCCTCT	CTACTTCTAT	180
GAGATCAATG	TCTTTATTTA	CTCGAAGTAC	TCTTAAAAGT	TTAGGACTTA	AGTATTTGAA	240
GAAATTCACT	TGCTTTTGT	TTTATTCTA	CTCAATACTT	TTTAATATAA	AGATTTACAG	300
TCCCCCCTTA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	AAAGAGGCCT	ACAAACTCAA	GATGCCCGAG	TGGATTGGAG	GCGAGAGCGA	60
GCTCAGGAAG	TTTCTAAAAC	ATCATTTGCG	AGGAAAGAAC	TGTGAAGTCC	TGCTGGTGGT	120
ACCAGAAGAG	GTAGAGGCTC	ATCAGAGTTG	GAGGACCGAT	GTGTAACAGT	TCTGCCCAAC	180
CTCCCTCTCG	CCTCAGCCCC	TTCAGTCCTC	TGTGACGTGC	TGTGGCCTCT	ACAGTGGGTC	240
TGCCCTTGCC	ACTTCCCCAA	ACATCTCATC	AAGTTTTTCC	CCTTCAGATC	TGACAGTGCA	300
ATAGGACAGA	CGTGTGGACT	GTTATAAGAA	CTACTCAGTG	TTTTGTTCTT	GGGCAAACCT	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	AAAGAGGCCT	ACTCTGACAG	TGTTTCTGAC	CTTTAGCATT	TCTTTTGTAT	60
TCTTTCTTAG	AATTCTCATC	TTCTGCTTAT	ATACCTGTCT	ATTCTTGCAT	GCTGTCTACG	120
TTTCCCATGA	GAGTCCCTAG	CACATTAATC	ATGGTTGTTT	TACATTCACA	GTCTGGTAAT	180
TCCAGCATCC	CTGCCACATC	TGAATCTAGT	TCTGATGCTT	GCCCTGTCTC	TTCAAACCTCT	240
GTTTTTTTGC	CTTATAATCT	TTTGTGAAA	GCCGAACATG	ATTCCTGTAC	TGGCTCTTCT	300
GGAGGCTTCT	GCCCTGTTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTGTG      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCCTGT TTGTGAACAG ACACCCTGCT TCTTGATAAC ACAAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CGGTCATTTC TGCCAGAGC ATAGAGGTCA      540
TTTTCATAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAAATGTTT CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCAT ACTGTACTCG AG              712

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAAATAGGA      120
TGGAGTGTTC TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTTTTTCT TTTTCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATT TGTGTACTT TGGTAAAGGA CCTCTCCCC TTCCTCCCC ACACATACAG      300
ATACACCCAC CATAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTCGGCC TTCATGGCCT ACAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTTA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACCTAA AAGAGAATTT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CCAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                                         312
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```
GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAAATA TAGGTAGTTA CTATTTAGGG TAACTAAAC TGTCTAAGG AATAGAAAAT    120
AAAAATTCCA TGTCTTCAAA AATAATTCTT CCCTCTCAAT CTCTCTGAAT ATCTCATAAG    180
AGTATTCAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAAATTACT CTAAGAATCA TCACCCTCGA G              291
```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```
GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTACTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAACTGT GATGGTGGAC CTGTCAACTT CTCCTGTGG TTTTATCAGT    120
TTTTCCTGGG TATTTTGAGG CTATTCTGAT AGGTACATAA AATACAAAAA TTGCTATATC    180
CTCCTAATTA ACATTATTA TCAAATTGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240
```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GGCGTGTGCC ACCACGTTGG      120
CTAATTTTGG TATTTTGTAGT AGCTTTTTTT TTTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGSCATTCA      240
CTATAATATG GTAGTTGTGT ATACATTATAT AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCGTTATGCT      240
TTGTCAACCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTATAAAG      360
GTGCTGATGG GAAGGGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCAGCGG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GTCGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTGCG      180
GTCCACGATG AGGTCGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTTG TATAGAGTTC      60

```

TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG	120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA	180
AACTGGGTGC TAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTGTGA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTCGCGCAC GTCCTAAGCT GACAGTCCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGTCT TTTTTCATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA	120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT	60
AAAATTCCTT TAAAAATAGG GTAATAAAAT AGATGAAAT TGTATCACTC AATTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTGTGTTT	240
GCTTTCATT AAATGTCACA TTGAATTCTA GACGTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT      60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAAG      120
TGATGCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA      180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCACT TCTCCCCTTT      240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG      300
GCCGAATTC                                     309

```

(2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT      60
TAAAGGCATT ATTTATAGA CCTTACAACT ACCCATATAA CATTATTATC TTCATTTTAC      120
AAATGAGGAT AATAATGTTA TATCTCGAG                                     149

```

(2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT      60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA      120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGTA      180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTAT      240
TTCATAGTAA TTTCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTT GTATGTCTAT      300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG      360
TCTCTATTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATTT AACAAATGAAA      420
AAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG                                     455

```

(2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG	60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC	120
GGAACCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCTGT GCATTGAGGG GTTAACATTA	180
GGCTGGGAAG ATGACAAAAC TCTCGAG	207

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG	60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATT CTAGTTGTTT TTGTACTTTT	120
TTTGCATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT	180
TTTAGAGGAA ATAGTCAAAC ATGAACTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTTCTTCC TTCTCCTGGT	60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT	120
GAAGCCTTCG GAGACCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA	180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC	240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTACCA TACTACTAGA	300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT	360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGCTCG	420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

```

GCTCGGCTCG CTGCAACCTC TGCCTCCCAG GTTCGAGCGA TCTTCCTGCC TCGGTCTCCC      60
AGGTAGCTGG GACTACTGGC GTGCGCGACC ACGCCCAGCT AATTTTTTGT ATTTTTAGTG      120
GAGACGGGGT TTCACCATGT TGGCCAGGAT GGTCTCAATC TCTTGACCGC GTGATCTGCC      180
TGCCTCGGCC TCCCAAAGTG CTGGGATTAC AGGCTTGAGC CACCGCATCC AGCCAACATT      240
TTTCAAATAG AAAATCTGAA GCTAAATCA CCCCTAAAGG ACAAATAACA GGACTATCTC      300
GAG                                                                                   303

```

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

```

GAATTCGGCC TTCATGGCCT ACTAGATTAT GGATTTTTTTT ATTTCATGG AAGTGAAGTT      60
CAAAGATGCC AGAGTGGTAC AGTTCGAACA AACTGCTTGG ATTGTCTTGA TAGAACAAAT      120
AGTGTGCAGG CATTCTTGG CTTAGAGATG CTAGCTAAAC AGTTGGAAGC TCTTGGTTTA      180
GCTGAAAAGC CTCAGTTGGT GACTCGCTTT CAAGAAGTTT TTCGGTCAAT GTGGTCCGTG      240
AATGGTGATT CAATCAGTAA GATATATGCA GGAAACTCGA G                                                                 281

```

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

```

GAATTCGGCC TTCATGGCCT AGACGTGATG TGTGAGAGA AGAATGTTCT AGGCAGAGGC      60
AACAGCAGAT GCAAAGGTCT GAAGGGGAGA CAGACCGAGC TAGAAAAGCA TGGCACATCA      120
GTGATCTAAG TTCGTGTGGT TTCCTAAGGT TGGAACCTAG GGTGCAAACT GAGGATGGGC      180
AGATGAGGTG GAAGAGGAAG AGCAGACCCA GGTCACAAAG ATCTTTTGTG CTAAGGATT      240
TTAAGCAGGT AGGAGGAGAG AGAATATGAG CCTTGGGATT TGAAGTCTG TGGGTGTACA      300
GAAAAGAGA AACTCAACGA GAGGTTTAGG TTAGGGACG TGGTAGGCTT TTGCAGTAAG      360
GGACAAGGAC AGAAGGCTCA TCTGAGGATG GGAGGGACAC TTTAGAGGCA AATCCATAGG      420
ATGCAGTGGC TGAACAGAAA AGGTGAATCT CGAG                                                                                   454

```

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

```

GAATTCGGCC TTCATGGCCT AGTCATTAA TTAACTTAG CAAACTCCA ATAGTGTAAG      60
TTAACAGATT TTGGAACTG GTTTTAAGTA GATGTATTAT AACATAAAC AAAGCTAGCC      120
ATTATCAAGT TATTTCTTG TTAGCTATTT TTACAGCATG TGCATGTTAG GTAGTCATCG      180
TGAAAGCAAG AATCTTAAGT TAAATACATG TTTTTTTGT TTGTTGTTT TACTGCTGTG      240
CTGTATAATA CATGATGCTG TTAGCAGCGG AACGTATCAG AGACACGGCA CCAAAGTATG      300
TACTGTCCG CGAAACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

```

GAATTCGGCC TTCATGGCCT AGACTGCTGG CATATCCACC CCACCTGTGC TGCTGCCCCC      60
GCCAATCCAT CAGGGCAGCT CCGACTCCTG CAGCACCAC CGCCAGGAC GTCAGTACT      120
CAGGTTTTCT GGCTGCTGGG GTTCCGCACG AATGGGCCCT TCTTTGGGA AAATGCCAGG      180
GAAGGGGAAC GGCTGGGCTC GGGCGCCACA GCTTGTCCTT CCAGCCAGCA GGCACAGATG      240
TATGGCGCAG GAGGGACAAC TGGCCCTGT GGCAGCCCC AGAGAGACGG GCCCTTTCTT      300
TGGGACCCTG GCCTCAGAGG CCTGCGTGTC ACAGCTCAGG GTCTGGCTGG GCAGGGGCAA      360
AACCTGCCTT ATTTGCCAGA TGTCCAGAA GTACACAGGA GCAGACGCAC CACTTCGATG      420
GCTATTTTAG GAGGCTGGTG ACAAGCAAGG CATGGTGGCA GGAAGCCAGG CCCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

```

CTCGAGGTCC CTGTCCTGCT CAGTTTCTCT TCAATGTGGA AGTCCTGGA GGTCACTCTC      60
ATGAGAATAA GGTGCTGTAC TTTCACAGCC TTCTCAGACT TTTCTGAGGA TGGCCTTACA      120
CTTGCCAGCT AGTGGAGTGA GCAGAACTCC TCCTGGTTTC TGTGGCTGTT CTCAGAATGC      180
CCTAGTTTAC TTTCAGTAA TACTTTTTTG GGAACATTTT GTGTTTCTCA TTTTCTCAGG      240
TCCCCAGGC ACACCATCTT TCCTCTGCTT CCTCTCACAC AGGTGCTGAT ACTGTGTAGG      300
TTTGGGCTG TTGTTCTGGC CCACTCCCTG ATATTTTCTG GGTGTTGTCAC CTAGTTTCTT      360
TAAAAGTATC ATCTACATGG TTTGGTTTC ACTATCTATT CTGTCTTTAT TTGAACACTA      420
GGGGAAATTC ATTATGCCAA TCTCACACAT TGTGTGATTC CATTAGGCCA TGAAGGCCGA      480
ATTC

```

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC AAAGAGGCT AGGCAAAATG AAAATACTTG TGGCATTCTT GGTGGTGCTG      60
ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG CCCAAGCAAC      120
AATGGTGGCA ATGTTTCAGGA GACAGTGACA ATTGATAATG AAAAAAATAC CGCCATCATT      180
AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTGG ACTATAAACA TGGCTACATT      240
GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA TCAGAACATC      300
CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA CAACATGTTT      360
TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA AGACGTGGAT      420
TGGTTCTGTC TTGGGTCACC CATTGAGAAA CTCTGCAAAC ATATCCCTTT GTATAAGGGG      480
GAAGTGGTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTGCAAAGGC TGCACTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG TTGAAGGACT      60
ATGTTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCA ATGGTGAAGT      120
TGCAGATACA ACAAATTAT CATCTGGAAG TAAAGATGT TCTGAAGACT TTAGTCTCTT      180
CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA AACAAAATTT      240
TATTTCTGAT ATAATTCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG      289
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GAATTCGGCC TTCATGGCCT AGAGCTTGGG AGGTTGAGGC TGCAGTGAGC TATGAGCTGC      60
ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAAC AAAAACAACA      120
ACAAAAACTT TATTCCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA CATGGTTGGT      180
AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA TTTGTAAAC      240
TCAAAATATC TGGAAAGCTT GGTGAGGCGA GCGGGGACTG TAACTCAGCA CTCACCGCAG      300
GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CGGTGAACAG CCCCTCGTG      360
AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC AACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```
GAATTCGGCC TTCATGGCCT AGATTGTAA AAGATTTTCC TAGATTACT GTGTTCTGGA      60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTTCTTA ATATTTTGA GTATTCATAG      120
TATATAATCA TACTAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTAG      180
ACTTCTAGT TTTTTTAAAG GATACTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA      240
TTTTGCACA GTTATAATAC ACTCTCGAAT CTCGAG                                276
```

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 379 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```
GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG      60
TGGAGTGGTA ATGGCCAGAA CAGCCTCTTT CTGTTTTGCA TTTAGTCGAG GATCCAACTG      120
TTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGCTGGAAA      180
CAAAACCCCA TTGTCCTTGA TCCTGTCTAG TGCATAGTGC ATTTACAGAG GGGGTAATCG      240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTACACAGTCA GGCCGAAGAT TAAGTTCTTC      300
ACAGCATTCC CTAGATAGCC TTAATAATAT ATATTCCTTT GTTTTTTCTT CAATAGTAGC      360
TTCCTAGACC TGCCTCGAG                                379
```

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```
GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA      60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAAGATT TTCCTGTCCC TGGAGTGCCA      120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCCA      180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCCAAA GTATTAATGC AACTGAAGCT      240
GTGATATTTC CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAAACCAAC      300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA      360
GATATAACCT TATATTGGT AAGTGTTTCT TGTGCTATTT TATCACGCGA CCTCGAG      417
```

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 154 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTCAACAA TAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TTTAAAGTAT	120
TAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 252 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATGTTCT TTGCTCAAAT AAAGTGTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTGAT TTAGATTGG GGCCATTAA TTTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:-
(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT	60
TTTTCCATCA GATTATTTTG TAAATATTT CTCCCAGTCT GTGACTTGCT TTTCCATTC	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTTCATT AGTAGATTGT GCTTTTGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```

GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATTT CTCAAAACTA NCTTTCCATT      60
TNAGTACACG ATTTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA      120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTGGA AACAAATTCT ACATATAAAG      180
CATCTTTAAA TAAGTTTGT GTTCACTGAA CTGAGACTTC TTTCACTTAT GTACCTATGG      240
AAGTTAATCT GAGCATACAC ATATATACAT ACTTGCATAC ATATGTGTAC ATATGTTTTT      300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGGAA      360
CAGGGCGGTC TGCCTTAACA ACCCTTCTCT AGGTTGAGGA AGGCAGGTAT AGTTCACTGA      420
AGGATGTGAT GAGGCTGTAG TAAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC      480
TCACCACCAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG          534

```

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```

GCTCGAGTGT CGTGCTATCT CTAAATTGTG ATCACTAAGA ACCGCTGCGG AAACAGTAAC      60
TGTTCTTTT ATTTTGAACA TTTTAGTTTG TAATTTATCC AATCTTTCT TCTTTTGATA      120
AGTCTCCATT CTCTTTACTT CACGGGTATT TTCAAATCA TTAATCATT TATCACAGTG      180
CCACTGTGTA GACCCTAATG AACGATGTCA CCTCTTATC AAA          223

```

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGCC TTCATGGCCT AATTACTTGA CCGTAATAG GGTGTGGCC GTTTTCTGAT      60
GCCTAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTTCAGTAAG      120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTTGTG CCAAGATAAT TTATCCAGTC      180
ATTGGGAATA GTAAGTTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT      240
GTATTGTAT GGGGAGTTGA AGATTCAGAT AGAGGTATTA AGATGTGTGG CATTTACTTA      300
AACCATCACA TTTTTTCTT TCTACGCCCC CTTCCTGTA AAACACCTGG GAAGTCCAC      360
TGGTGTATC CATCCTGATG CTTCAGACCA CCTCCCTTC TTCACAGACC GTGTCACCTT      420
GCCTGTGGGT GGGGGCTAGC CAGCCACCAC CCTCTTTTCT GTGCTGCCAG CCAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:


```

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTTTTTT CCCCTTTCCC      60
TCCCTCCCTC TCCGCATTCT TCCCTTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC      120
CTGCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCTTCT CTTTCTTTG TGTGTGTGTT      180
TATTTAAGTT ATTTTCTTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT      240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTTGCAAAC AGCCGGACTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GGTGAGGATG GTGGCTGTGG TTGTGTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG      60
GATGGTGACT CTGATGCTAA TGTGTGTTGT GGTGATGGAG GCAGCTGTGG CAAGGATGGT      120
GACTTTGGTG GAGAAGGTGG CCATGTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT      180
GGTGAGGATG GTGTTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC      240
TGTGATGGTA ATGTTGGCTG TGGTGATGAA GGGTAGTTAT GGTGAGGATG ATGACTATGG      300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG              334

```

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAG TAGGGGTGGA GGGGTAGGAG GATTACTCT      60
TCCAGCGAGA GCTACGCGCA TCCCATCTC CCCCTCCCC CTACCCGGGC TCCGGCNTGG      120
AGGCGGGGCG TGGCCGGCCT GCTTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC      180
TGCCAGGACG GCTGTGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAGTTC      240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG      300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGCTGCCT      360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG      420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGCG      480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTTAACCTC      540
TGACTATGCA ATTCTGAAAC CTCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT      600
CCACTCTCCT TCCTCCCGCC GTGGTCTCGA G              631

```

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCCAGAAA	AGTTTTTGTC	AAAAATTGA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTT	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGTT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTA	TTATGGAAAT	CTAAAAAAA	TTCACCAAAT	GAGAGAGAAC	ATTACAATGA	120
ACCACCACAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTTGTTCCT	180
TCCATACCTT	CAGACACCCT	CCGTCCACAA	ACTGGGTTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCCGG	CCAACCTTAA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCCACCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAA	ACAGCCAGCA	NGCAGCCAAC	TTCCTCTCGG	GAGCCTGTGG	CTTGACGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNCA	ANGCCTGAGT	GGTGGCTGGN	GATCCTGGGC	360
TGCATTTCGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAACCTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACTGTGTGG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GGTCTTCCCA	AGATGGCAGA	ACATTCTTAC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCGGCC	TTCATGGCCT	ACTCAGAACA	ATCACTGCAT	ATCCCATCTT	AAAGGCAAAA	60
CCCAAACCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTTG	120
AGACCCCTTT	TTCTTGAAAA	AGGGACTTCA	CTTTTTTGAG	CAGCATTCTA	TGGTTCCTTC	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAAACACAGA	240
CAGCCACCAT	CCCCATATTC	GTAATAAGAG	AAACTCCAGA	AACGCAGCCA	CCGTCCCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC	AAAGAGGCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTCTCTTA	CTTTTGAGGA	ATCTGTGAGC	120
AATTATTCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAAC	ACAGAAAGTG	180
CAAGATTTCA	GACCCAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATTT	GCATCTTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCCAACC	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTT	ATGGTAACAA	TCTGCCTCCT	420
TTAGCATTGT	ACTGTTTGT	ATGCCAGAA	GACAAAGTTG	CCTTTGAATT	TGTCTTGAA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCCAATTG	GCCATTCCCT	AACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GAAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACGAGTATT	CCATGGTCCG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCCTTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CCGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGGA	CTTCCAGGCC	TCTAGAACTG	TGAGAAATAA	TTTTTTGTTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTTCA	TTGTAACCTG	AATGGACCAA	GCTGGTGTA	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCCGAACA	TACGTATAAA	CTGATCCAGC	AGTTCCACTC	300
CTGGGTATGT	ACACCACAGA	AAGCTATGTC	CACCGAGACA	TTGGCAAGAA	TGTTTCTAAC	360
CACACGCTGA	CTGTAGCCCC	AAACCTGAAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTTACAG	ACATGAGGTC	540
AAGCAAAAGA	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAAACTGAT	CCATGGTGTT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC AAAGAGGCCT AAGAAGCTGC TTCCTCCTGG GAACAACCGC CTCCCGCTCC      60
TAGCAGGTTG CTACTGCCCC GAACCCGCGC TGCAGGGAAC AGCGGGGCAA ACAAACCAA      120
TAGAGCCATG GCGACTCCCT CTGCTGCCTT CGAGGCCCTT ATGAATGGTG TGACAAGCTG      180
GGATGTACCC GAAGATGCTG TTCCATGTGA ACTGCTTCTT ATTGGAGAGG CTTCAATTCC      240
TGTGATGGTG AATGACATGG GCCAGGTCCT CATTGCTGCC TCCTCCTATG GCCGTGGCCG      300
CCTGGTGGTC GTGTCCCATG AGGACTACTT GGTGGAAGCC CAGCTCACGC CCTTCTCCT      360
GAACGCAGTG GGGTGGCTTT GCTCTTCCCC TGGGGCTCCC ATTGGTGTAC ACCCATCCCT      420
GGCACCTTTG GCCAAATCC TCGAG                                         445

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(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT ACTGTGATT AAAATCTGTC TGTGTGGCTT GGGTTGTTG      60
TGTTGGTTCC AAACCCCTGAA TCTTTTGGGG TCTTCAATTT GTGGGCATGT CAGTGGAAAT      120
TCTAAGCTTT GTTTAATGGT GTGTGTGTGT CTGTCTGTCT CTGTGTGAGT GTGTTTAGAA      180
ATTGGCTTCT CTGGGTTCTT CGCTCGTCTT CTGGAAGGTG GGGTTATAGA CATGCTGGTG      240
AATTCTGAAT GTTTTATAAA TTAGACTATT AACGGAGTTA AATTGAAGAA ACCTTCTGTC      300
ATAAGACCTT CCAGGAATTC CATTCCAAAT GAGGAAATGC ATAAAGACTT GTCCACTTGG      360
CAACATTGG GTGTTTGGGA GGTGGACTCG AG                                         392

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(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGCGGCTCC CTTGGTCCTG GTGCTGGTGG TGGCTGTGAC      60
AGTGCAGGCG GCCTTGTTCC GCTCCAGTCT GGCCGAGTTC ATTTCCGAGC GGGTGGAGGT      120
GGTGTCCCA CTGAGCTCTT GGAAGAGAGT GGTGAAGGC CTTTCACTGT TGGACTTGGG      180
AGTATCTCCG TATTCTGGAG CAGTATTCA TGAAACTCCA TTAATAATAT ACCTCTTTCA      240

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TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACTCA CTGCTATTGC 300
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60
GCTTTCAGTT GTCATTCTGA TGTCTGCAA CATATCATCG TGTTTGATTG TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60
CCTCTCCTGC ATTCAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180
TCACCCTTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTTT 300
CCTTCTGGTC ATTANAAC TG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480
CAACACCGCC TGTTCCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GCGTTCCAC CAATACTCGC CCACCTTGCT 600
CAGGTTACC AAAACGCACT TCCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CRAAGTTTATT 60
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATCCGCA AGTCAACATC 120
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATGAT 180
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG 240
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTG ATTTTACCT 300

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TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT    360
CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT    420
ATGTTTGACG AATATTTTCA AGAATGCCAG GATGTACTCG AG                                462

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(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA    60
TTTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC    120
AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA    180
ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTCTCTGC    240
TTCGATGCTT TGTCCAGAGA GTTGGAATCT CAACGTGTGT TTCATGTGAG GTCCTTTAAG    300
AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCC CTACCTCTGG GCAAAAATGT    360
GATGGAGACT TTTTGGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA    420
TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTTCATCA ACTCCCTTGA CATAAGGTGG    480
CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA    540
TTCTCGAG                                548

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(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

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GAATTCGGCC AAAGAGGCCT AGTTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC    60
TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTTT    120
CTTGTTTCTT ATTTNCTAAA CCCTTAATC CTGCTGAGGT CATAACAACC TCAGTCTAAG    180
CTCTGTGTCC ATCATACTGT TAACTTAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA    240
CAGTCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACTCTTTT GAGTAGCAAT    300
TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTCACATTG AATTTGATTA    360
TGCCCTACAG ACCTGGCTGG TCAAGGATTT GATATACACA TATTGGCTTG GGATTGAGC    420
TTTCTTTTTT ATTTAAATAA AAATTTATAT ATATATTATA TATATACATA TATACATAGC    480
TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC    540
GATAAATTGA CCGATTGGGA GGTATTCTCG AG                                572

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(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGTCTTTTC	CTTGAGTGTA	ATTCACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAATCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCCAGCAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCCTTCC	CTTCCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTTCC	CTGGGGATAT	CCTGCCTCCT	GCCAAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGGTGCCTG	GAGGCTGAGG	CCCAGGGAAG	CCCCCAAACC	480
CCAGTGTCTG	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTTCCTTTA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAAACACA	ACAAGCCAAG	120
CGGGGTCACC	AGCACCTCAT	TGTTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTTG	ATGTGGTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTTGTTTC	AACCTTCTGC	480
GTCAGATTTC	CAGTTCTGTT	GGAACCAGGC	TCCCTATGCA	ATTGTCTGTG	CTTCCCCGTA	540
TCTCCTGGCC	TTCAACACCG	AACTCGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAG	120
TAATATGTAA	AGAACTTATG	ACTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCCTCC	TCATCCAGTT	CATGGCCACA	TCCAAAGGTG	360
TAACCTCTGAG	CAGTGTCCCTG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCAT	CGAGGCTCAA	GCTGTGTCGA	TCAGTGGAGG	TCTTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

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GAATTCGGCC AAAGAGGCCT AATTCACCTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTTG GATGGAACAG TGGCATT TTCCTTTTTC      120
TCAGGACTGC AAACAGACCT AATATTGCGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGCTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTACCCCGG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATT TTTTAAA TTCAGAT TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTCAGC CAGGGAGGAG ATTTACCCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCAGAGT CCACTGTCAT TCAGGATTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAT GAAAGGAGGT GTTTTGTGTT TGTGTTGTT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG              592

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(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGGG CGAACACGCC GCGGTCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGAAGT TCTGTCACTG GATCTGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAACACAGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTGTTGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTACCCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTA CTTGTTCTCTG TATCTATTCA CAGGCGAACT CGAG              584

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(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

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GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

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ACTCCAAATG ATGACATGGT CTTATTTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG      120
AAGAAAAAAC TTTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG      180
ATCCCTACCC AGGCTTCTGT CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT      240
CTCCTGAGGC TCTGTTTTCT ATGGTTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG      300
TCACACATGG AAATCTTATC TAAAATTTTA TACCATTAACT TTTTATTCA CTTATTAAC      360
CATACCATTA ATACTTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA      420
GTACTATGAG CGATCTCGAG

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(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA      60
AAGAGCTACA GAGTCAGCAT ACCCATGTG CCCAGGACCT GGCTATGAAG GATGAGTTAC      120
TCTGCCAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGCAAAAG GAAGAGATGG      180
CACTAAAACA CATGCAGGCA GAACTGCAGC AGCAACAAGC TGTCCTGGCC AAAGAGGTGC      240
GGGACCTGAA AGAGACCTTG GAGTTTGAGC ACCAGGAGAA TCAGGTGCT CACCTGGAGC      300
TGGGTCAAGT TGAGTGCAA TTGAAAACCA CACTGGAAGT GCTCCGGGAG CGCAGCTTGC      360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG      420
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTCCACAG ATTGGTTTTA      60
ATAAACAAAC TCCCTCAATG ATGAGTGGTC TTTTGAAGAG CATGGTTAGA ACTTGGGATT      120
GTGCTTCTCA TGA CTACAAA TGTACTTGTA GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT      180
AGCTAACTAC TGAGGATTGA TTTTCCTGAC GCTGGTGTG AAGTGTCAAC CAGAACTGGC      240
ATATAAAGTG GCTCATTAC CCAAGTATCT TCCTTTCCT TTTACAAAAT CCTTGGCTGT      300
TGTGGGGCCT ACATCTCTTC ATGATTATTA TTGCATCTGG TGTCATGTTT TTCCAGCTGG      360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC	TTCATGGCCT	ACTGGTGCCA	CGGGAGGCAG	ACACCAAGTT	CTGGGGTCTC	60
CAGCTGCAGT	GGGTGGCCGC	CAATTGCTTC	TCTCTGTCCA	GACTAATGAG	AACATGGAGA	120
TCACCAAGTG	ACTGCAGTTG	GAATAGCACG	TAAAGAGGGA	GCTGGGAAAG	AAGCTGGGCA	180
AGCTAAAGGA	CATGGTAACC	CTGCCCCATC	CAAGAAGAGC	TGGAAGGCGG	GCACCAAGCT	240
CTGGGGAGGG	GAGGTGTGAA	GCCAGAGGCA	GCTCCAGCCT	GGGGGACAGG	TGACCCAGC	300
ACCTCCAGG	GCAGTCCTGT	GACTGTTTCT	TGCTTCCCGC	CCTCTGACAT	TTAGTGGTGG	360
GTTCTGTTCT	CCTAGGCTCT	GACATCATCA	TCCCAGCTGG	AGTCATGGAG	CCTCCCAAAC	420
ATAGGGAAG	AGATGGTGGT	ATAAGAGGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC	AAAGAGGCCT	AGGATGGCTG	TGTTTGACGG	GTGTTGCTCG	TGACAGTTGG	60
GGTCCTCCTC	AGCATCAGTC	TTGACATGGC	TGCAACTGGG	GGGGTCCTCG	GGATCCTCCC	120
GGAATCTCTT	CCTCAGCATT	CGCTCATGAT	AAGGTTTCAG	GTGTCTTGAT	GGTTCAGTCC	180
TGGAGAAACA	TAAGCATAAC	CTCTACCCCA	AGTTATTATT	TTACCTATTT	CCCAACTTTC	240
TGTATCAGG	TCTCTCCACC	AAACCAAGTT	TTCTGCTTCT	GTCTTTGCAG	CTGGTTTCTG	300
TAGATGCTGT	TCAGCTGCTG	ATAAGATCCG	GCCTTTAGGC	AGGCTCAAAA	AATTTAAAGT	360
TAATAATGCG	ATTCAATTGC	TTATGGGGTG	TCCTGTAGTA	CCTGTTTCC	CCCTTTTGCT	420
TCTGCAACTG	CTGTTTCAGG	GAGAGATTCA	TTCTTTCCAC	TATGGCNTGT	CCTTCAGAAT	480
TATATGGGAT	ATCAGTAATG	TGTTTAATAT	TCCGTATAGA	GAAAAATTTA	GCTAGAGCTT	540
GAGAATTAGG	TTCCAATCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC	AAAGAGGCCT	AGAAAAAGAT	GTCATTCCGT	AAAGTAAACA	TCATCATCTT	60
GGTCCTGGCT	GTTGCTCTCT	TCTTACTGGT	TTTGACCAT	AACCTTCCTCA	GCTTGAGCAG	120
TTTGTTAAGG	AATGAGGTTA	CAGATTCAGG	AATTGTAGGG	CCTCAACCTA	TAGACTTTGT	180
CCCAAATGCT	CTCCGACATG	CAGTAGATGG	GAGACAAGAG	GAGATTCTCG	TGGTCATCGC	240
TGCATCTGAA	GACAGGCTTG	GGGGGGCCAT	TGCAGCTATA	AACAGCATTC	AGCACAACAC	300
TCGCTCCAAT	GTGATTTTCT	ACATTGTTAC	TCTCAACAAT	ACAGCAGACC	ATCTCCGGTC	360
CTGGCTCAAC	AGTGATTCCC	TGAAAAGCAT	CAGATACAAA	ATTGTCAATT	TTGACCCTAA	420
ACTTTTGAA	GGAAAAGTAA	AGGAGGATCC	TGACCAGGGG	GAATCCATGA	AACCTTTAAC	480
CTTTGCAAGG	TTCTACTTGC	CAATTCTGGT	TCCCAGCGCA	AAGAAGGCCA	TATACATGGA	540
TGATGATGTA	ATTGTGCAAG	GTGATATTCT	TGCCCTTTAC	AATACAGCAC	TGAAGCCAGG	600
ACATGCAGCT	GCATTTTCAG	AAGATTGTGA	TTCAGCCTCT	ACTAAAGTTG	TCGATCTCGA	660
G						661

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATT TGACTGCTTC TCTCATGCAG GGAATAAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATTT      120
ATTTGCACCC AGTTCTGTTC TACTCAGCCT GACGTTTTAT CATCTTTTTC AAAAGTGGCG      180
TGAAGTGGTG TGGAAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTTCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```

GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGAAGAAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG

```

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```

GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATTCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GTCATAGAAT	GAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAAATTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTCTTA	TTTCTGCTA	AATTAGAAAG	60
AAATTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAGTTCTT	CAACAAAAG	TAGGTGACTG	120
AAAACGTAT	GTTTAACTAT	GCTTAAGTTA	ATATTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCCTTCAAG	AGGCTACTGA	GAATGAAAAC	300
TCAAAATCTG	CACAAATAGG	GGTGGTGGAA	GGAGAGAAAG	AAAACCTCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

```

CAGAATGGGA CTCCAAGCCT GNCTCCTAGG GCTCTTTGCC CTCATCCTCT CTGGCAAATG      60
CAGTTACAGC CCGGAGCCCG ACCAGCGGAG GACGCTGCCC CCAGGCTGGG TGTCCCTGGG      120
CCGTGCGGAC CCTGAGGAAG AGCTGAGTCT CACCTTTGCC CTGAGACAGC AGAATGTGGA      180
AAGACTCTCG GAGCTGGTGC AGGCTGTGTC GGATCCCAGC TCTCCTCAAT ACGGAAAAATA      240
CCTGACCCTA GAGAATGTGG CTGATCTGGT GAGGCCATCC CCACTGACCC TCCACACGCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

```

GAATTCGGCC AAAGAGGCCT AGTTTAAAGA AAAAAAAAAA GACCCATCAA GGGCATAGAA      60
AAGCTTAGGT GAAGAAACCC TAAATGAAT CCTCATTTAT CAACTCATTC ATTTATTGAT      120
TCATTGTGTC ATTCATTGTT TCACTCAAGA AGTATTTGTT GCCAGACACA GTACCAACAA      180
AGAAAAAAG CATCCACTAC GGCTTTGCAG AGCTTGGTAC GCAATGCCTG GTTCAGAGGA      240
GATATTGTT CATCGCTGTC TTTTAACTGT ATCACAGCCT AGGGTGGCAT GCAGAGGTTT      300
GAATAAGTGC TGAAACAGGA CAAGTGAGGT GCTTATGGAA ACACACAGGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

```

GAATTCGGCC AAAGAGGCCT AGAAGGAAAT TGTCCGAAT CCCTGCAGTC TTTCTGTAGG      60
TTGCGGCACA ACGCCAGGCA AAAGAAGAGG AAGGAATTTA ATCCTAATCG GTGGAGGTCG      120
ATTTGAGGGT CTGCTGTAGC AGGTGGCTCC GCTTGAAGCG AGGGAGGAAG TTTCTCCGA      180
TCAGTAGAGA TTGGAAGAT TGTTGGGAGT GGCACACCAC TAGGGAAAAG AAGAAGGGGC      240
GAACTGCTTG TCTTGAGGAG GTCAACCCCG AGAATCAGCT CTTGTGGCCT TGAAGTGGCT      300
GAAGACGATC ACCCTCCACA GGCTTGAGCC CAGTCCCACA GCCTTCCTCC CCCAGCCTGA      360
GTGACTACTC TATTCCTTGG TCCCTGCTAT TGTGCGGGAC GATTGCATGG GCTACGCCAG      420
GAAAGTAGGC TGGGTGACCG CAGGCCTGGT GATTGGGGCT GCGCCTGCT ATTGCATTTA      480
TAGACTGACT AGGGGGCTCG AG                                     502

```

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GAATTCGGCC	AAAGAGGCCT	AATCAAATAG	TAAAGGCTGT	TCTGGCTTTT	TATCTTCTTA	60
GCTCATCTTA	AATAAGTAGT	ACACTTGGAT	GCAGTGCCTC	TGAAGTGCTA	ATCAGTTGTA	120
ACAATAGCAC	AAATCGAACT	TAGGATTTGT	TTCTTCTCTT	CTGTGTTTCG	ATTTTGTATC	180
AATTCTTTAA	TTTGGAAGC	CTATAATACA	GTTTTCTATT	CTTGGAGATA	AAAATTAAAT	240
GGATCACTGA	TATTTTAGTC	ATTCTGCTTC	TCATCTAAAT	ATTTCATAT	TCTGTATTAG	300
GAGAAAATTA	CCCTCCCAGC	ACCAGCCCCC	CTCTCAAACC	CCCAACCCAA	AACCAAGCAT	360
TTTGGAATGA	GTCTCCTTTA	GTTTCAGAGT	GTGGATTGTA	TAACCCATAT	ACTCTTCGAT	420
GTACTTGTTT	GGTTTGGTAT	TAATTTGACT	GTGCACGATC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GAATTCGGCC	TTTATGGCCT	AGGATTTTCG	ATGCAAGCTC	TTGTTTCTCA	GGCTGCCTGC	60
AGAAGAAGTC	GCTATAAATT	ATCTGTTGTC	TACATGGTAC	AAGGCCCAT	GACTCATCTG	120
ATGCTTGTTT	TGTTAATTTT	TTTAATATTT	TTATCACGGG	GCAGTGGGAG	GGCTTGGGCT	180
TTTAGCCACA	GCTGTTTAA	GACTTCTGAT	CTCCTGCCCT	GCAGGAATAG	GTGGCAACTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

CTCCACCGAG	AGCCTGGACA	GTATGAAGGC	TCTGACAGCC	GCCATCGAAG	CTGCAAACGC	60
CCAGATCCAT	GGCCCTGCCA	GTCAACACAT	GGGCAATAAC	ACTGCCACCG	TCACCACCAC	120
GACTACCATA	GCCACCGTCA	CCACGGAGGA	CAGGAAGAAG	GACCACTTTA	AGAAAAATCG	180
ATGCCTGTCT	ATCGGGATAC	AGGTGGATGA	TGCTGAAGAA	CCTGACAAAA	CAGGGGAGAA	240
TAAAGCACCC	AGTAAGTTCC	AGTCCGTGGG	AGTGCAAGTA	GAAGAAGAGA	AGTGCTTCCG	300
CAGGTTCACT	CGATCCAACA	GTGTGACGAC	AGCAGTACAG	GCCGACCTGG	ACTTCCATGA	360
TAATCTGGAA	AATTCTCTGG	AATCTATAGA	GGACAATTCT	TGTCCTGGCC	CCATGGCCAG	420
ACAGTTCTCC	CGCGATCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGGAAATGA GGTGTATGTA	60
TGGATCTATG ACCCAGTTCA CTTTAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA	120
GTAATAGCGG CCACCCTCTT CCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTTTATTAC	180
CTCAGTGTGG GTGCAGGCTG TTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC	240
ATTCTATTTC TCATCATTTG GCTCATAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT	60
TATTATTGTT ATTATTATTA TTTGGAGAT GGGGTCTCAC TTTGTCATCC AGGCTGGAGA	120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAAGTCT GTGCTCAAGG GATCCTCCTG	180
TCTCAGCCTT CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTTA AAAACATTTC AGAAGTGAAC	60
TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TTAAATCAT AAGAATGCTA	120
AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTGCAGT AGGAAGCTGG	180
GTAACATTGT TCCTTATGGC TTTGTTGTCG CTTCCAGAAT TTCATTAAAA ACTTTTAA	240
AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAAGCAAA	300
AACACATGAG CCACCGGCA CGCTGGCCT TTATTTATT TTTCTACGTT ATTATTCCTG	360
TTTTCAGAGG AGGGAATTGT CAGGGAAGTC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT 60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC 120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA 180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTCAAAATT CAGTCTGGCC TTTTGTGTTG 240
TTGTTGTGTT TGTCTCTTT AGATGGAGTT TCACTCTTGT TGCCAGTCT GGAGTGCAAT 300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCAGGTT CAAGCAATC TCCTGCCTCA 360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT 420
AGTCTCGAG
429

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC 60
AGGCCATTG GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA 120
GCCCCCTGTG TCCTCTCCTG GGTCACTTTC CATGACCCTG AGGCAGCGAA GACAAGCTCG 180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC 240
TGCCCAAGACC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA 300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA 360
CAGAAGATGC TGGCGGTGCA TCTCTCCAG CACCGAGAGG CCTCGAG 407

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(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTATTTTT GCAGATTAGG AACTAAGAC 60
GTA CTGAGGC TGGGTGCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAATC 120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT 180
AAATCTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCIT AAACAGAAGT 240
AATTAATTCTG TTGTCAGAAA TTGGCAAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT 300
GTCATTGGA AAAAATTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA 360
AAAAACCCTT TTTGGAATGC TGTGAGAGAA GTAGCACTCG AG 402

```

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:


```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTT TATCCTTTCA    60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG    120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC    180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTCCCT GTAGTCCCAG    240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA    300
GAATTC AATT AGGCCATGAA    320

```

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA    60
CCTGCATTTT ATTAATAATCC CTCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA    120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATTA GTGCCTGCAC TCCAGGTCTC    180
AAAGTATACT TTGAGATCTA GGTATCTGCA CAAGGTGCTA TCCTGAAAGG ACTCTAAATG    240
AGACAACCTCG AG    252

```

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT    60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT    120
CATATTTTAT GTCATGTTAA TGATAAATT TCTGACTTTG ATTTGTATGT TTTTGCCCTT    180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC    240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG    280

```

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG    60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT    120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG    180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACCTTTAT 60
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240
 TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC 60
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTTATT TGTCATTCA GCAAACACTT 120
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
 GGAAATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATTT GTACAAATAT 240
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATCTGGA AGACACTGAC TGA CTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT 60
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT 120
 CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTTGGTGG AAGACGTAGA TTTTCTGGA 180
 AGACACTGAC TGA CTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT GACTGGAAGA 240
 CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300
 TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                         263

```

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTCCTCACC ACCCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT      120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCCAGGCC TTTTCCAGAA ACCATACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCACTGCCAC GTCACCCTCG AG                                         262

```

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCACACTCC CTTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                         285

```

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCTG	GGGCCAGTAG	CAGCACCCCTG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACCTCTACAG	CAGTGCTTAT	TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTGGT	ATTAACGGGT	TTTTGTCTCA	GAACTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAA	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAC	GAAATGTCATC	CTTCATAAGG	ATTGGGGCTC	TTAGCTCCTT	CTTCTCTACT	300
CACTTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTACTA	CCCTGTCAAA	GTGAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATAA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCG	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTGAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CCTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTCATCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGCTGGTG	GACCCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACGAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCCTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAAGTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAACTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAATAA	CTTGAATGTT	GAAGAGAACA	GCAGTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAAGTTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTECCCTTGT      60
TATTCATTGC CCTGCCCAGT ATTCAGGCAA CACGGATCTG TTTTCTGTTT TAGGTTAGTT      120
TGCATTTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCG      180
GGGAGCAGTG TGGCTTCTTT CATTTCAAAT GATTGTTTTG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTTATTC ATCTCTTTGT CTGTTGATAG CCATTGGGT TCTTCCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACITTTGT      60
ATAAATTCAT TGTCTGTTTT ACAGTTTGAA TGGCTCTTTT ACCCTGGCAT AATTTTGTA      120
CGTGTGGAGC ATTTGGAAAA TTTTATTGG ATTATGCAGA TATTTTCAAT GCTGTATTT      180
CATTATATGA TAGTAAAAAA TCACTTTTTG TTTTGTTTT TTTTGTTTT TTTTCTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTGTGCGCC CAGCCGAAGG CGCTCGAG                    288

```

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACTTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCCAAGGC ATCCTTGCCA GCCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTCTAA AGGAAACCTG      180
TGCCATTGGG TTAATAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTTGA      240
ATATTTTGAG CCAAATTTG TTACCTCCA TACCTCGAG                                279

```

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTG AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTT CTTCACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTTA      120
TTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTTAAATAT AAATCATGCA CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAATTT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAAGTTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC 180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC 240
TCCCTTCCTT CCTTCCCTCC TTCCACCTT CCCTGCTTCC TTCTTGCTG CCTCCCTTCC 300
TGCCTGCCTC CCTTCTGCC ACTTACATTC TGTTAACAAT GAGAAAAAAA TTCCCCCATC 360
ACTCGAG 367

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGACTCACGC 60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA 120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTTG ATATCTTCTC 180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GACTCTAAT TGGCCACCT ATCCTCAGCT 240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA 300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG 340

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCCAGGAC AAGACCCTGA 60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG 120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG 180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT 240
GTTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT 300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTTGTGGGG ACTTCCGGCG AAAGCACCCC 360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGT GGGGATGATC 420
GCCAGCTTCA ACAACACACT CGAG 444

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC 60

```



```

GTGACGTCAG TGACCTCATT TTA CTGATC TATTAGCAGC ATTCATACA GTTGTGACT 120
CTTCTCCATT AAAACATTTA CTTTATTGG CTTCTAGGAA ACATATTTTC CTGCTTTTTC 180
TTCCTATTTC TCTGACTCTT TTCTCAGTTT CCTTGCTGT TTCCTTTTCT ATCCTCTAAA 240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATT CTTTAAATGGG 300
AACTGTGCTG GTGACTCAA TTTATATCTC CAGCCAGAAC CTTTCTCCTG AATTCCAG 358

```

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

CCTTCATGGC CTACTTCTGG TATTACATCA CACTGATCAT GCTGCTGGTG GCCGTGCTGG 60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGGAAT 120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCTGAAAGC CAGCATGAAC ACATCCTCTA 180
ATCCTGGGAC ACCGCTTCCG CTCCCCCTCC GAATTCAGAA TGACCTCCAC CGACAGCAGT 240
ACTCCTATAT TGATGCCGTC TGTTACGAGA AACAGCTCCA TTGGTTTGCA AAGTTTTTCC 300
CCTATCTGGT GCTCTTGAC ACGCTCATCT TTGCAGCCTG CAGCAACTTT TGGCTTCACT 360
ACCCAGTAC CAGTTCAGG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGTC TCTCCCTCCA GAAAACGCAT 60
GCTTATTGAC CTTGGTTTG ATCTGCTTGG CCGTGTGCTG CGAG 104

```

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACCG AAAGTGAAG 60
CTATACCTGA CTTCCAGAGA ATGTGGACCG GATATAAGAT CTTAATCTTC TCTTATCTTA 120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAGTGGAC CTAGAGGCTT 180
ATTTCACTAG GAATCACACC GTTTTGCAAG GTACTCGATT CAAAAGAGCC ATTTTCCAAG 240
GGCAATACTG TAGAAATTTT GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCACTGAGT 300
TCTATGCGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT 360

```

```

GCTGTCCTGA CTACAAGTCC TTTGCGCGTG AAGAGAAAGA ATGGCCTCCT CACACACAGC      420
CTTGGTATCC AGAAGGTTGC TTCAAAGATG GTCAACATTA TGAAGAGGGA TCAGTAATTA      480
AAGAAAACTG CAACTCCTGC ACATGCTCAG GACAGCAATG GAAATGTTCC CAGCATGTAT      540
GCCTTGTTCC TCCAGAATTA ATTGAACAGG TCAATAAAGG AGACTATGGA TGGACAGCAC      600
AGAATTACAG CCAATTTTGG GGAATGACTT TAGAAGATGG ACTCCTCGAG      650

```

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GAATTCGGCC AAAGAGGCCT ACACGTATTG GCCAGGATGG TCTTGATCTC CTGACCTCAT      60
GATCCGCCCG CCTTGGCCTC CCAAAGTGCT AGGATTACAG GCGTGAGCCA TCGCGCCCAG      120
CTGAGAATAG TTTAAGAAT TGGTTGAGAG GCAGTTGCTT TTTCTTTGAA TATCTAGAAC      180
TGTTCTGGAC TAACGTCAA GAAACACCAT GGCAACATTA AAGGGAAGAT TATTTGAGAG      240
GCGGGGGATA GTATGGCTTA GGACTTGGGC TGCTACCTTT GACTTTGTAA TTCAAAGAT      300
TGTAATGTTT CATATTTTCA ATCTGATCAT TAAAAATATC TGTGTTACAT GCAAAAAAAA      360
ACCTATAGGC AACTCGAG      378

```

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

```

GAATTCGGCC TTCATGGCCT AATTTTAACA TTTACATAGA CAATTCATTT GGTGTTTTGT      60
CTCCTAGTTA TTTGGCCCAA TCTCTGATGA TTCCACTCT GTCTTGGCCA CTCACTCCGT      120
TTGTCATATC TTGGCCATTA TCATCACCTC AAATTGCTCC ATCTTCAAAA TACTTGCATC      180
TTATTTATTG ACCATATTCC TTCCACTTGG TTTATTGAAC TATTCCTCT ATCATTCTCT      240
GATTTCCTG CAGCCAATG      259

```

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

```

GAAAAAACT ACTAACCCT GCAAGCTCTT GTCAAATTTT AGTTTAATTG GCATTGCTTG      60
TTTTTTGAAA CTGAAATTAC ATGAGTTTCA TTTTCTCTT GAATTTATAG GGTTTAGATT      120
TCTGAAAGCA GCATGAATAT ATCACCCTAAC ATCCTGACAA TAAATCCAT CCGTTGTTTT      180

```

TTTTGTTTGT TTGTTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTCT 60
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180
TTTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAACGTGTC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGGAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGTTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACCTTGACC 180
CAGGTTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTCA CTGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```
GAATTCGGCC TTCATGGCCT ACCGTGTGTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA      60
GCCAAGCCCA GTCCTTCCTG TTTCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC      120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTC TGTTTTTTGT      180
TTGTTTGTTT GTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA      240
TCTCAGCTTA CTGCAACCTC TGCCTCCCGG GTTCACACAA TTCACCTGCC TCAGCCGCCT      300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTGCGA      60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAAATGGA      120
AAGGACAAC CTCGAG                                     136
```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT      60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT      120
GGCCTTCCAT ACTTAGCTCA CCCCAGGCACT TGAAATTTC ACTTACTAAT ACAAACTGCT      180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA      240
TTCCTCTGGC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT ACAACCTGCT TTCCACCTTC TGTAATCTCC CATCAGTGAT      60
AAATTACCCA TCAGCTTTCC AGATTCCAGA ATTTTGCTGA CATCTCCTGT TGGCTATGTT      120
CTTATTTCCT TTTCTGTTTA TTCCTGTGAC CTTGTGCCCT TTAATTCTTT CCCATAATTT      180
GTTGGGACTT CAGAAGGAAG TGGAGCTAAA GGCATGTGTC TGCCTGCCCC ATCTTGGCTG      240
GAAGTTGGGA AGGCCTTCCT TCCAAGGCAC CCAGCATAGC ACCTGGCACA TGATGGATGC      300
TCAGCAAATG TCTGTGGGTC TTCTTTTAC TAAACAGGCA GTTGATTTC AAGAGTAG      360
TGACCACCTA AGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT AACACAGCTC ACATCAGAAT ATAATAGTGG AACTAGGGTG      60
ACTTCACTCC CTTTCACCTG ATGTCTATCT TGGCCTTTTA GCACCTTGAC TATCCCTGAA      120
AAGACTGGGT CTTTGTTTTC CCAGGGAAAA AACGAAGTGA TGATAGATCTA AGAAATAGTG      180
CCTCTTTAAT ATTAAATTCT TACATGACAA CTAACACACA GGGAAAAGGC TATGTTAAGT      240
TGATTATAGC TCCTCTTAAA ATGTCCTATG CTGTCAGTTG GTCTTAGAGA CATGGGAATA      300
ACCAAGCAAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GCGATTGAAT TCTAGACCTC ACCTCTGATC TATCTCTTTT ACCTCAGCAA TTTATTTCCC      60
AATTATTATA TCTACTTTAT TGTTCTTATG AGACAATAGA CTATGATAAT TTTCCAGAAA      120
TAATTTTGTT TTCTTCCTCC CATCTTCTAA TGTGAGACC GTTCTCTGT TTTCTTTCAT      180
CTCTACCCCT CAGTCTCATA GGTTTATTTT TCATTTCCAA TCCAGCGATT TCAAACCTG      240
TACAACAAAC CAACTCAGCA GCCCTTGGCA ACTTGAGGAG ATTCACAAA CCACTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

GAATTCGGCC TTCATGGCCT ACCATTTCCA CAACCATTTT AATCTGCCA TCGGTCCCAG	60
ACGTAGGGAT TCCTCGTCTC ATCTTGAAA CATTGCCAGC AGTGGTTCTG ATTTGGAAGC	120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCCTGCC TCTCTTTCTT CCGGCAGTGC	180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTTCCGTCT	240
GGCCGGGAGA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGGATTT TGGTGTGTGC	60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA	120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGGCAG	180
CCCCCTCCTC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTATTATT TATTATTTTA	240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTTG	300
CAAAGTTCCT TTTCCCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA	60
CATAGTCAAC TTAATAAAAA AGAAGCTAAT ACAGGTTGAG CATTCTTAAT CCAAAAAATCC	120
AGAATCCAAA TGCTCCAAA ATCTGAACT TTCTGAATGC TGACCTGATA CTACAAGTAG	180
AAAATTCAC ATACAAGTAC TTAACACAAA CTTTGTTTCA TGCACAACT ACTAAAAATA	240
TTGTATAAAA TTAACCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTTATTG GTGAATTGA TCCTGGCTGT	60
GGTGGCCATG GCCTATGAGG AGCAGAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA	120
GGCCGAATT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT	180
TGCGGCAGCA TCAGCTGCTT CAAGAGATT CAGTGAATA GGTGGGTTAG GAGAGCTGTT	240

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCTT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
TTATAAGTTG TCTAAAGGCC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCCTAAA 120
TTTCAGTGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AACTGGGTC CTGATAGTAG 180
GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCA AATCCTCCTC TGGCTGCTGA 300
CCCTCAGGTT CAGTTTTTCC TGTCACTGGA GGTGAGGGT GGGGCGTAGG CTGGCTGTGG 360
AGAGTAGGGG AGAGGACCTG GGTTCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
AGAAGCATGA ACAGACAACCT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
CTTCAATCTA GAGGAACTT TGATCCAAA GGCATGAATA ATTTTATGA CAACATAGAA 180
CCTGGCCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTTGCCT TTTATAAAGA CTGACAAAAT 60
ATAAATCTTT ATTCTAACC TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTGT TTTTTTGTG TTGTTGTCAT 180
TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240
GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAG      180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCAACCT      240
AATAACTACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTATAT AAGGATAATT TGTCTGAAT CAAGACCACA      420
CTGTCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCCTCCACAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCCTG CCGAATTC      598

```

(2) INFORMATION FOR SEQ ID NO:1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAACTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTAAAAAGA AGATCATTTG CTTTTCATTTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTTCATCA      300
TCCCAATGCG CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG      346

```

(2) INFORMATION FOR SEQ ID NO:1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTCC CCAAACTTCC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTTCCACAA GCTCCATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```


CTATTTGGCC TTCCTATG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCACCTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTC 60
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTGTGATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTTGTAGAG ATGAGGTCTT 240
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGG CTTTGTCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCTTAGA TTTTATCTGA 120
ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTTCAATAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AAGACTTCTT GCAGGAAAAA TGAGTGCATT GAGGATAGTA    60
ACCTGACTTT CTGACCTGTG ATTAAATTAT GATAGTAGTC AGTCATTTTA CTCTCCCAGG    120
GTTTGAGGAA GTGGCCGGTG AGGACTTGGA GCCTAGTGAG GAGTTAGTAG AGCTGCCCCAG    180
GGTGGAGGAG GCCACAGAGG ACAGCCCTGG TGAAGAGAAC AGTGAGGCCT TGGATGTGTT    240
GATATCCAGC AAGGACCTGG CACTGTCTAG TGAGGACGAG GCCTGCACAG GATCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT AAGTCACTTG TGTAACGTAG TTATACTTTG CTGCATTNTA    60
ATTAACCTTC AACAGCTATT AAAGTGGAAT GTAAGTTAAA TTTTGAAGGA AAGGAAATAA    120
ATGTTTCCCA TATTTTCGTCT TGATTACTT TCTGTATGAG AACAGCTGTG TTTTGTATAG    180
GTTTATGGTT TGCATGAGTT CATATTTAAA GTGATCCAGG CCAATGCATG GCTATTGCTG    240
TAAATCTTGA TGTTTATTTT TGCCTTGTA AGTTCTATCA CGGCCTACCT GGAATTTAAA    300
ATTCAGTAGA CAAATTAATT GGTCTCTGCA ACAACTTTTT TAATAAGTAG ATTATTTTAC    360
AAAGAAATTT GAACAAATTT AATTGAATCT TTTGTTTAGC TTGCCTCTAA GAACTTTCT    420
TAATAAAGCT CCCAAACACT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

```

GAGTGAGACT CCCTCTCAAA GGAAAAAAA AAGTTTCTA GGATCAAAAT AGGAAAACAG    60
TTGTTTCAGA ACTCATGATA TGAGTCATGA CTACAACCCA CCATATTGAG TAAAACCTCA    120
CCTTGTCCTG TTGTCTGACA TTAAGTGTTT TACGAGATCC ATACCTGTGA AATCAGCTCC    180
TCTGGAATGA CAGATGCTGG AATAACTGGC TGGGGCTGAC TGCCCAAAAG CCCAGACCCT    240
CGATCCCGTC CTGTCCGAAT AACTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```
GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCAATCAA CAATATTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```
GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCAATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACAATTCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```
GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG      120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACTT TGACTATGCC TTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

```
GAATTCGGCC TTCATGGCCT AGCCTTCNAA GTTTGAATGG CCCTTAGGTT TTAAGTTATC      60
TATGCAAGA TGAANAAGGC CTTCACATTC TCAAGGTGA CAACTCATAC CCAGCCATT      120
GCTTATTTT GCCTGCAGAC CTCCAATGGA AGTCCGGGCA CATGGCGGAG AGCCTCACCA      180
ACATGCCACG GCACTCCCTC TACATCATCA TTGGAGCCCT CTGCGTGGCC TTCATCCTTA      240
TGCTGATCAT CCTGATCGTG GGGATTGCGC GCATCAGCCG CATTGAATAC CAGGGTTCTT      300
CCAGGCCAGC CTATGAGGAG TTCTACAACT GCCGCAGCAT CGACAGCGAG TTCAGCAATG      360
CACTCGAG                                         368
```

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

```
GAATTCGGCC TTATGGCCTA GTTCATTAA CTAATACTTG TATTAAATCA CTTCTAAATG      60
CTTATTATAC CCTGTATTAT AGTATTATAT TCTGAGTCTT AAAGGTGCTT AATGTGAAGA      120
TTCTCTCTCT ACATATTCAA CTCTTACTAA CTTTGGGCTT TAGGTAGAAA TCAGTTAGTG      180
TATTATATGA TAAAATAGGA AACTATTTC CTAGGGGTAT AGGTATTGAG TAGGGAGCTT      240
TGGAGTCTCA ATGAGCTTCT TAAAGAAGCA TTTTAAATGG TAGGTTTTAG GGAGAGTTT      300
TGTAAGTAA TAAAGTAGAT GAGAAAGTGT TGCCTCTAAA CAATCAACAA GCTGGGAATG      360
GGGTGCAGAA TGAGGAGAAC CCTAAGCAAT AGGCAATAAG AAGCTCGAG                                         409
```

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

```
GAATTCGGCC TTGGCCTAGT GAGAGAGCGT CAAAAAACT TCCATCTCAG CCAACCACTG      60
ATACTAGTAC TGACAAAGAA AGAAGTTCAG AGGACATGGC TGATAAAGAA AAATCTACAG      120
CTGACTCTGG AGGTGAAGGA CTGGAAACAG CCCCAAAGTC TGAAGAGTTC AGCGACCTCC      180
CCTGTCCAGT CGAAGAAATT AAAAATTACA CAAAAGAGCA TAATAATTTA ATTCTGCTAA      240
ATAAGGATGT TCAACAGGAA AGCAGTGAGC AAAAAATAA ATCAACAGAC AAAGGTGAAA      300
AGAAGCCAGA CAGCAATGAG AAAGGAGAAA GAAAGAAAGA AAAGAAGGAA AAGCTCGAG      359
```

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTTAT	TCTAAGAAAC	TTAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAG	CCTTGCCATT	TCACACATGC	120
TGTTCTTTT	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTGGGAC	TTCTTTTTC	180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA	240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG			280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAAACCATG	AAAGAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACTT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTTGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTGG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

GAATTCGGCC TTCATGGCCT AAGCTGTTAG TGATTCTGAC ACCCTTGGAC CTCCAGGAGT	60
AGCTCCTCCT GCCACGAGAG GACTCTGGCT TTTCTAATAA GGAAGGTTCT GGCCAATCAG	120
TCCAAGAAAG GCCCGGATTC TCTTCCAAGG TGTGTCTCT GCAGAAATGT TCCTCAGGGT	180
GGAAGGTGCT GCTGCAGCAA GGGATGTCCC CTGAGTTTC AGGTATGTAG TCTGTGGCTG	240
CAGCAGGTGA ACACTCCTCA CACTCCCATT TCTTACTGTT AGATCTAAGA GAGGAGCAGT	300
CCCTGTGGGT TCCGTGGGAT CCGCATGTAG CACACAGAAT GAGGCACCAC CTCCTTCAT	360
CCTCAAAGCT GTCTCTGCCT TGTTCATACA GACAGATGGG GGCATCACAG TGCTGATAGC	420
GCTGATATAA GTCTGAGAAA GCCCTGGCT CGAG	454

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC TTCATGGCCT AGTGATCTCA TCTCTCCGTC CATGGGCGAA AAAACAGCCA	60
TCACCAGGCC ATTCACGCTT TGTGCTTTTG TTAGCAGAGC CCAGGCAGCC CTGCAGCCCA	120
CATCTAGGGT ACAAAACGGAA CGGCGGCGTT TTCCTTGAT CATTAGAGG AAATTTTGA	180
GCTGAACAGT ATTTTTTTC TCCCTCTCTC TCTCTGTA ATATTGCTGA GATTAAAGG	240
AGGACGAAGA CAACAGATTC ATAGCTGGGT CTGCTGTT TCCTGACGCT GACCACAGCG	300
GATCTAGTTT CTCTGCAGAA GACAGCAAGA TGCCCCAGGG AATGTTTGTG AAAAAGGATG	360
ACTGGATGGG AAGCAAGCTG AAGAAAAAGA AGGAAAGAAA GAGAGAAATC AGTAAATCAC	420
CACACAAGAG GTGGAGAAGA GGAATCGAG	449

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GAATTCGGCC AAGGGACGGG TTGTGAGCAA TGATGATGGA AGCATATCTT ATGAGTCAAG	60
ATCTGAACCT GATGTGCTG TGGAAATACT AAACATCACA GAAAAACAAC GATTTATGGA	120
TGGAGATAAG AATATTGCTA TCATCTCAGA AGCTGCCATG CTCGAG	166

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```

GAATTCGGCC TTCATGGCCT ACATTATTTA CACCTGTCCC AGACTTTGAT TCAGGAACATA    60
ATGCTGCAAA GCAAGGACTA TGATGGAAAA TGCTCACTGC AAGAATGGTA GCTGCAGCAA    120
GATCAAGATC CCAGAAAGCA GTGGCCAAGG CACTCACTGT AGACTTTAGT GCCTGCAGCA    180
TCTGGTGCAA GCTACACTGT CTACGCCAGG GAACACAGCA GCAGCATCCG GCCTGGGCCA    240
ATTCTGTGTA AGATTGATG CGCTGTCCCT GGCTGCAGTG CCTGCAGACA TCTCTCTCTA    300
GCCCTTCTAA CAATTTCACA GCAACTCAAC ATCTTTAAAA ATTTATTAGC CAACCAAAT    360
CAGCTTCTGT GGCATGCAAG TAAAAACCCA GGCTGATATG TCTGAATACA GAAGATTAT    420
ATTAGTCCT TAGAGTCAAT AATCCATACA GACTCTATTC TAGCTTCTTT GTGAAGTGGG    480
TAAGAATTCC TCTGCCTCGA G                                         501

```

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```

GAATTCGGCC TTCATGGCCT ACTTCAAAAA CATATATTAA TATTTTGTGA CCACGTAAGT    60
TCATCAGAAG CCTGACTTTA ATCTCTGATT TATTATATTT GAACACTGTG AAGAAGCAGT    120
TTAACACTGA ACGAAAGTGT CGTAATGCAG CTTTCAAGT GGCCATTAAA GACAGATCTC    180
TGCTTTTCTA TTAGTACATT TTCTAAGATG ACTATCATTG CCATTGTAGT CAGCTTTGTG    240
TACCTTTATA GAGATTCCAG TATAAACCCA GAAACGCTCG AG                                         282

```

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```

GAATTCGGCC TTCATGGCCT AGGAACTTT TCAAGAAGT AGTCCACGAG AACTACCTTG    60
AAAGAGCAAA ACCAGCCAGG TGCACTGGCT CACGCCCATA ATCCCAGCAC TCTGGGAGGC    120
CCAGGTGGGT GGATCTCGTG AGGTCAGGAG TTCAAGACCA GCTTGGCCAA CATGGTGAAA    180
CCCCATCTCT GCTGAAAATA CAAAAGTTAG CTGAAAATAC AAAAGTGGCA CATGCCTGTA    240
ATGCCAGCTA CCGGGAAGG CTCGAG                                         266

```

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```

CTCGAGCGTA TCCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA    60
TAATAAAACC TTCCAACAAG CTTCTTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC    120
TGAACCAAAA AAAAAAAAAA ATAGAGTATA AACATACAC TTTTCAGGAA TGCTTATTGG    180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTTTGAG    240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGGTAATCTT GGCTCACTGT AGGCCATGAA    300
GGCCGAATTC

```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC    60
ATCTGATCAA GAAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA    120
TGAGCATGTA CATTCCAAAC TGAAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT    180
GGTATCTGGT TCACTAGTA AATCAACCAC CCTTCCAAGG CCACGACCTA CCAGGACTTC    240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA    300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG    360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC    60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG    120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA    180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAGAA    240
AGAAAGAAAG AAAGAAAGAA AAAGAAACA GGAAGCAAG AAAGCACGAA AGCAAGCAAG    300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA    360
GACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:


```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTT 60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC 120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA 180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG 240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG 300
ACAGGCACAG ACCCCCCCCC ACCTCGAG 328

```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC 60
TCTGTTTGC AGTTTAGACA CAACTGACCA GCATTGTTAA AATGGAGATC ATACGGCTGG 120
TAGAACAGAC TCTTTGTGGC CCAAAATTAG CAAATTATAA ATAGAATCTA AAGCCATCCC 180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA 240
CTCGAG 246

```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA 60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAG TCGGGACAGA 120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA 180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA 240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCAGCTG CTAGAATTTC GATGCAGGAC 60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCAAT CACGGGAAAC 120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA 180
ACACAGTAAA CAATTGCACC AAGATCTCGA G 211

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```
GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAACCTCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                         269
```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```
GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTTCCCAAGT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                                         133
```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```
GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAC CACAATCCTC      120
GAG                                                                      123
```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT	60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CGGTCTCTAG GTGCCACACT GAGACACAGC	120
TACCATGAAG TTGGGCTTCT GCTTCTCTTC CTCTCTGTGG GCATTTCAT TTTCTCTGTG	180
CTTATCTACT CCGTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAATG AAATACCTTC	60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG	120
GGAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAGGG GGAGGGAAGG GGGAGGAAGG	180
AGTCGGGGAC GGCCTCAAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCGC CACTCGGTAC	240
CCGCTGCTAG GCCTCTTTC CGAG	264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT	60
TACATTCATC TCTGTATTCT CTCAGCTGTT GTTAGAAGGA CAGAATGTIA AACTTTATCT	120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTTAA AGTGAAGGCA TGACTGAAAC	180
TAAATATTT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTGTTC ATTGGGCTTC	240
CTTGTACTTA GTTTTTCAT TTAATAATC AAACCAACAC TTTTAAAAA ATAATTCAGA	300
TGAGACTGAG CCATATCTGC AGTAAGAGAA ATATTCTTA ATGTTTGGT TACTTATGAT	360
AGAGTACTTT TCTTGATACT GTTAACTTTG TGCTTTTTAA AAAAAGTGAT TCTCTAACAG	420
ACCTCTTAA TGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA	480
GGAATTTTA TCAATAAATG TCATGGGGCG GCGCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCTCTTT CAATTCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCCT CTGTATTCTA GCCAGAGCAT ACCTGCATTTC      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGGCCTCT TTGGCCGAAT TC                                          562

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCAGG      60
CAAGCAGCTG GTCAGTCTTT GTCAGTGTC CAGCTTCCAA AGCCTAGACA ACCTTTCTGT      120
AGCCTAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTTT CCTTGAGCTC TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAATCTTC TGGGTAGTCC CCTGTTGATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTTG ACACAAAGCT      300
TCTAAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG                                          435

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCGCCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAACTTTGA AAAGCACCCC AAAGAAGTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTCT CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTACCCTT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCCAATT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCACTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAAC TCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAAGCTCA TCGTGGGACA CAAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTCAT GGAATAAGTA      540
AAGAACAAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAATGAA

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTAA CATTTTTCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTACCAAAA CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTTAAAGTC ACTGACCTTA ACAGTTTGA ACTAGATAAA GGAAATTTTG      60
TGGTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCAATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAGT TCAGCCACTT CCAATTCTTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGCAGCTGC      60
TGTGTCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCTTGAATTC TGGCTACCAC TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTATCA ATTCCCGCGT GTCCGCCATC TCTCTGCCCA CTGCCCCTCC      420
AGCTGTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCCTCG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTGAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCCCT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTC TGGGTCCTTG CAGCTGTGAT GGTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCCCTC AAGAGTTTCT GGGCTGGATG TTTGAGAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACCACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC TTCATGGCCT AGTGAACTC CATTTTTTTA CTGCTATTAC TCTGTGTTTT	60
CAGTTTTATG ATTTGGAATA CCATGATGGG AACATCTATA CTAAGCATTC CTGGGGGCAT	120
AAAACAGGCT GGATTTACTA CTGGAATGTG TGTCATCATA CTGATGGGCC TTTTAACACT	180
TTATTGCTGC TACAGAGTAG TGAAATCAG GACTATGATG TTTTCGTTGG ATACCACTAG	240
CTGGGAATAT CCAGATGTCT GCAGACATTA TTTCGGCTCC TTTGGGCAGT GGTCCGAGTCT	300
CCTTTTCTCC TTGGTGTCTC TCATTGGAGC AATGATAGTT TATTGGGTGC TTATGTCAAA	360
TTTTCTTTTT AATACTGGTA ACCTCGAG	388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA TAAACACATC CTGGTGTCTC CACAGCCAAG GTTTTTAGGT TGCTATACCA	60
ATGGCTTAT AAATGAAAAT GGCACTAAAA GTTCTTTGAG ATTCTTTATA CTCTCTGCCT	120
TCAGCAATCA ATTCCATTCA TACATCAGCA CTCTGCTGGT TCTGTTTGAA ATATGTTCTG	180
TATTTAAAC TCAAATCTTG TTGGATCTCT GCAGGGCTTG TGACCAATGA AGTCATATT	240
GTTGATGGT GACAAAGCTT GCTTCACTCC ATCAGAGAAT GACTATCAAT TTTTTTTTAA	300
CTGTCTATC ACGTCCTCTC CTGTCACCCA TTTGAAGAG TGGCAGAACT TGAAGTTCAA	360
CTTCTCTGT AAATATCCAA GTATAAGCC CAGGAACCTC TAGAATAACC CAGATGCGCT	420
TTAATTTTTT TTAATATGTT TTGATCACAG AACTCCTTAG GCCTCTTTGG CCGAATTC	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC AAAGAGGCCT AGGAATTCAG TGCAAACT ACTTTGAACT GTGGTTCCTA	60
ATTTCCACGA AAGTTTTTCT CTGTTCTTCT ATTATGGCAC TTTTCAGGGT CTCCTTGTA	120
CATTTTAGTT TTTGTGTTTT TCAGTAAGTG CCTTGAGATC AGGGACCGGT TCTACTGGTC	180
TGTTCCAACC ATAGTTCCTT AAACATTGTG TTCCATTAAT ATTGGGTGAA TTGAAATGAA	240
TTTATAGGAA GCTCCTTAAC CTGGGGTCTC CAGACCTCTA TGGGGTCCAT GGACAGAATT	300
TGAAGTGGGA AGGATATATG AACTTGGATG GAGGAAAATT ACTTATTTGT TTTTACCAA	360
CCTCTCCTTT GTAATTTAGC CATTTGTTCA ATTATAATGT AGGCAAATAA AAATAAAAAT	420
AAAAATAAAA TAAAGGCAGC TAGGCCTCT	450

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTTC GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATTCCA CGCCCGGCTC CAGGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC      300
TGCGTGCGCG GGGTGCGTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AAACCTCGGA      360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTGCACG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCGGGC      540
GCGGCGGGCG

```

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC AAAGAGGCCT AGTTGTCAGG AAGAAGGCAT GGGATAGTCT GAGAACAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCAAG GCCTTGCTGC TGTGGTCTG CAGGCAGCTC TGTAGGGCAG GCTGTTGTCA      180
TTTTGCAAGT GAGCAAGCAG AAGCCAGGC AGGTGAGTCA TTCACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTAGTTAC ACCTGACTCC AAAACTTGAC TTTTACTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAA TAATACCTGT      360
TGCCACGAAG TAGGCCTCTT T

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAACATAA TCTCTAAAT      60
CTTCAATACT AAGAAATACC TTTGTTTAC CCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTCCA GCAGAACTTT GAAGACATTG CTCCATTAC      180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTTC TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC      300
AAAATTCAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360

```


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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCA ACGCTGGGGA      60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTGTA      120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG      180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT      240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA      300
AGAGCTTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCTCCC GACGGGACAC      60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC      120
GGACTGTACC CCTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA      180
GATTGCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCTG CCTAGAGGC      240
GTCTCTCGTG CCCCCACCG ACCCTGGCT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GGCTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA      60
GGGTCATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAA1AAGAC      120
ACAAGCCTGG TTGTGATATT TTCCTGATTC AAGTGTCTCT GTGGTTCTTG GTTGCCTTCA      180
GGAGAGAGTT CAAGCCTCTT ATGGTGTTT GTGAGGCCAG GCCTGAACTA GCCCCATCGT      240
CTGTTTATTC ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCCTGAT      300
TGCCTGTCAC TGTGTCTGAC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```

CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCAGC GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGCTGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCCA GGTTCGCGCA ACACTCCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCCG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639

```

(2) INFORMATION FOR SEQ ID NO:1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```

GGTCTGTGGT CTTGGAGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCCAT CTTGCCCTCG GTACACAAGT CACTGGCCTG GAACTCAGCC      180
TTGATTCACT GTCCGTCTTC ACGGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTTTAT AGTCACCAAG TGAATGCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448

```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```

GAATCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240

```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA 300
 TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTGAGAGC TCATCGATAT 360
 CAACATCTCG AG 372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA 60
 TTTTGTAGTC ATAATATTAA ATGGCAAAAT CAAATTTCCTT AACAATATAC AAAATAAAAT 120
 CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT 180
 CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT 240
 AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT 300
 TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT 360
 TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT 420
 CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG 452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG 60
 AGAGGAGGTA GGGAACCAGA TGGGAGAGAT CGAGCCAAGT TCTGGGTGGG AGGAAACTTT 120
 CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG 180
 GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTTGTA GGTCGAAAGG 240
 TCAAGGTAAA TGGCTGTTT TTAGGAAACA ACTGATCCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG 60
 TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA 120
 CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG 180
 CATTTATTAA CACAGCCTTA CATTTGCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA 240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```

GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG      60
TCTGCTGTTT CACATTGTTG ATAGAAGTGG ATGCTGTGGT GACATTTGGG AACTATCAT      120
GGTGCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC      180
AGATCCCAGA AAATTAAGAT TCTCAAAACA TAACTGTCGG AAAGGGCTTT TGAATCCACC      240
TTGGTGGCCT CTTCTGCCT CCAGGGCTCA TGAGATAGGC TGACTTCATA TGAAAGTTTT      300
GAGGATGAGG AAGTCTCTCT CCTCTTCAGA TACTGACCCT CTCTCTCCTT ATTTCTTGG      360
TGCCCAGAAAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAACTCACA GGTGTGATCT      420
GAGCCACCTA AAGCCCTCTT TGGGTTCTGC TCAGCTTGAG GGCATCACCT AAAGGCCACT      480
GGCTGCATT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC      540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA      600
CAAGCTTAGG CAGCTGGGGG CAGAGGGCAC TGAGAATGAG GCCCTAGCTC GAG          653

```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT ACAAAGGTT CTTGATGACC ACCACAATCC TCGCTTAATC      60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTG TTATTAGAGG AGTAGGGAAG      120
TCTGTATTAG TGGGAAACAT CAATATTTGG ATTTGCCGAT TAGAACTAT TCTCGCCTGG      180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCCTCAGT      240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC      300
ATCACCATTG TCGAG          315

```

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTTATTT TCTGTTTTTA TCATCTAGTC      60
AACTCGCAA CTTCCAGCAT TTGTCTAAAT CTAATCAATA TATTCAGTA CATCAGATAA      120

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```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT      180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAATCTTC CCTTCATCAT      240
TATTCAGAGT GTTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT      300
CGAG                                          304

```

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA      60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTGGT AATTTGTGTC      120
TTTTAGGAAA ATTTCATTTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTTCAGAA      180
TATTCCTTTA ATATCCTTCT AATGCTCTGA GAATCTAATC TGTATTGCAG TCTCTTCATA      240
TTGGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAACTC      300
GAG                                          303

```

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC      60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT      120
ATGGAAGTAT TAATTTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC      180
CTCTGCTCCA GTTTCATAAG TTTCTTTTGG GCTTGATCTT GTTTAGGATC AGGTGATATG      240
GCTTCATTTC TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC      300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG                                          330

```

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG      60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC      120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC      180
AGCGACCATA TAAAAGCCTC CTGCCCAA GCTTGTGGGC ACATGGGCAC ATACAGACTC      240

```

ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC AACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

```

GAATTCGGCC AAAGAGGCCT AGTTTGTAGT CAGAATAACA TTAATTTTGA GAGATTGAGG      60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC      120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA      180
GACTAATTTT GACACTTTGA AATGAAACT TCAAGGAAGA AGTAGCCACG GACAGTTATG      240
TTTATAATCA GTAGGTGGCA CTCTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT      300
TGAAGGTAA ATGCCACCA AAGTGCTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

```

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT      60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCACTGCAG CTGTTTATGA      120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCAGTG TCTCGTGAGG AGGCTTTGGC      180
ATTAATGAAT CGGAATCTGG ACATTTTGGG AGGAGCGATC ACATCAGCAG CAGATCAGGG      240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACCTCA ACAGGGACTC      300
TCTCTACCCA TATTTGGAGG ACATCCCAGA CCTGAAGTA AACTGGATCC CCTGTAATAA      360
TCGTAACAGA TTTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA      420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA      480
GTGTCCCCCT GATGGCCGTT CGCTCGAG                                     508

```

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

```

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG      60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT      120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTTCCCTCTA GCTAGTGAAA      180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGGTGGT GGGGACAGGG GTCGCCTAGG      240

```

```

GAACTTGCAG GGGCCGCGGC CTCTGTGTG CTCTTCTGGA GAGTGCAC TG TTTGTGGAAC      300
TTTTCTAGAG TGGCAAAAAC GATCTCCACT GTCGGTGAAA GGGCAGTTCC TGAAGTCAGC      360
TCATGGTCCT GGCTCCCCTT CTCCCAGCA GTGAACTGGG GGTGACTTCC TGATCTGCCC      420
AGCACAGGAG AGCCCCGCAA AGCGCTGGG AGGCCCTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

```

GAATTCGGCC TTCATGGCCT ACCATTTTGG ATTGATTTT GTGTATAGTG TAAGATGAAC      60
CCAATTTCTT TCTTTAGCAT GTGGGAATTC TGTTTTCTG TCACCCTTTT TTTTGTAGAT      120
GGGGTCTCAC TATGTTGCC AGGTTGGCCA TGAACCTCTG AGGTCATGTG ATCCTCCTTC      180
CTCAGCCTCC TGAGTAGCTA GGA CTACAGG CATGTGCCAC TGTGCCTGGC TCCAGCAACA      240
GTTGTTGAAG AGACTGTTCT TTATTACTT ATTGTATCCT CTGTGCTCGA G                                291

```

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GAATTCGGCC TTCATGGCCT ACCCACCTGC CCACGCCGAC TTGGGAGGAT GGTGGCCTGC      60
AGCGGCCAAG AAGCCAAAAA AAAAAATTTT TTTTTTTTCA GATACTGTGC TTGATTTTTG      120
GAGAGGGGAG AGGTGGAAAT TCCTAAATGG CTAATGCACT GTTCCCTCCA GCCCGAATGC      180
CTCCTGCCAA ACCCCTTTTC CCTGCTGCCT CTGTCCCGGC ATCCTTGTTT TCCCCTGGGT      240
CCGAAACATT TTTCCGAGG ATGAACAGGG GACATCTTTA GGTTTCTCAA CTCTTGCTTT      300
GGTGTGTTGCC GCAGCATGGA AAACAGGCAC CCCTCGAG                                338

```

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GCAGGAATCA GATTCACCTCA TTAGTAAGCC GCACTCGCTG AAGGGGAGAG CATGAGCAAG      60
GCAGACGTGA GCCACTGCGC CCGGCCTGAA GAGTTTTTGC TAATTGATA TTAGGGAAAA      120
CCACAGGATG GATTAAGACA AGAGAGGGAA GGTAAAGTTC TAGACAGCAG GATTATGTCT      180
GTTAGTTGGT TTTATGTCAC TTTTCTAGCC AAGCTGTACC ATCCTGTTTT TGTGTTGTGG      240
TGAATGCTTC CAGCTCTTTT CCTCCAGCCC TTGGAAGAGG TGGTCTATA ATTGTTAAGC      300

```

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAAGTTGA AGGCTGCAGG 360
GCTCTTTGCA GCGCGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGT 180
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTAGAC ATGCAATCTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
TTCCCCAATT TTTCTTTTGT CTCTTTGCTT TATTTCTGGT GTTTATTTT CCCCAGGTGT 180
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TTCTTTAATT GCTTTTTTGT TCACTCAAAG 240
GAAGGTTTTT ACCACTGAGA GGTATATAAA TAATTCACCTC ATATTTTTC TCTTTTTTTT 300
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGTT GTGAGTACGT 360
TGCAAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120
CTCCCTGGCA GGCCTTGGCT CCCGCTTCC AGAAACACGA TTTGCCTGCT TTAGAGCTTC 180
TGCTGCCAAC TGGGCCTTCT CCTTTTCCTT CTTTTCAGC TTGTGCCGGG CCCGCTTGGC 240
GGCCCTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTGC CCCCTTCAT 360
GGGCAGCTCC TCTTCCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCCTACT GCACAGGTGA GCTTGCCCGT 240
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT 60
CGGCTTGGAT TATCCCATTT GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACCGCC CCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG	ACGTGGCCAA	GGACAGTTGG	GCAGCAGAAC	TTGAAACTC	TTCCAAAGAA	360
AACGAAGTGA	TAGAGGTGAA	ATCTATGGGG	GAAAGCCAGT	CCAAAAAACT	CCAAGGTGGT	420
TATGAGTGCA	AATACTGCCC	CTACTCCACG	CAAAACCTGA	ACGAGTTCAC	GGAGCATGTC	480
GACATGCAGC	ATCCCAACGT	GATTCTCAAC	CCCCTCTACG	TGTGTGCAGA	ATGTAAC TTC	540
ACAACCAAAA	AGTACGACTC	CCTATCCGAC	CACAGACTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	TTCATGGCCT	AGGATCCGTG	AGGGAGACCG	CATCATCCAG	ATTAACGGTG	60
TAGACGTCCA	GAACCGGGAA	GAGGCGGTGG	CCATCCTGAG	CCAGGAAGAG	AACACCAACA	120
TCTCCCTGCT	GGTGGCCCGA	CCTGAGAGTC	AGCTGGCGAA	AAGGTGGAAG	GACAGCGACC	180
GGGATGACTT	CCTGGATGAC	TTTGGCTCTG	AGAATGAGGG	GGAGCTGCGT	GCTCGTAAAC	240
TGAAATCACC	CCCTGCCCAG	CAGCCCGGAA	ACACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	ACATTGTAA	TATAATTTAA	CAGAAGTTGT	GAAACTAAAA	60
TTTTCTAAGA	TTAACTGGTA	GTTTCATTGTA	AATGAACATA	ATGAACAGAA	TTTATGACTC	120
CACGTGTGAA	AATGCTATCA	AATAACTAAG	GAATATATAT	GGAATAAGTG	TACATATGTA	180
AAATATTGTT	ACTAGAGTTA	GATATGTGCC	AAAGTCCATT	TATCCCAAAT	CCTGTCTGAA	240
AAGGAGGGGT	ACATTGGTAA	ACATTTTGGA	GTGCTTAAAA	ATGCCAAAAA	CAAAATGGTA	300
ATTTCTACTT	TGATAAAGTA	AAAAAGTTAA	ATGTGTGTAA	AAAAGTGCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	TTCATGGCCT	ACGGTGGCCT	TTGGGGCCGA	AGTGGGCGTG	CGGCTCGCGC	60
TGTTTCGCGC	CTTCCTGGTG	ACGGAGCTGC	TCCCCCGTT	CCAGAGACTC	ATCCAGCCGG	120
AGGAGATGTG	GCTCTACCGG	AACCCCTACG	TGGAGGCGGA	GTATTTCCCC	ACCAAGCCGA	180
TGTTTGTGCG	TGGAGAAAGA	TCGTCTTTCC	TCCCTCCCCA	TGACCGGGCT	TCCCGCGGGC	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 178 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGCTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTTAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTGCCCC TTGACTTCT 180
AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTCC TATTTTCCTG 300
CATACCTTAT CTTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GTCCTCTTCG GGTGGCGGGA AGCCAGTGCC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACCTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTTCAC      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG      597

```

(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGACTG TAATCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCAGTGAGC TGAGATCGTG CCATTTCATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCTG GTGCTGTGGA ACAACCAGCT      240
CAGCACACA GGCATGGCCT TCCTGGGCAT GACACTGCCG CACTCTCAGA GCCTGGAGAC      300

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```

GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT    360
CATCAGCAAC CGCAGCGTGC TGGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGGCAGGG    420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCCTCG    480
AG                                                                    482

```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC    60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC    120
TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGGGGTAG    180
GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTGGGA CCAGTTGGCT GTNATCAGCT    240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTTTCCTC ACATTCCTCA AGCAGGTACT    300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT    360
GCCATCTAAT GGGGGAGACA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAGT    420
GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA    480
GGGGCAGACT CGAG                                                                    494

```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG    60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTGGA AATCCAGTTT AGGCTGATTT    120
GAAAAGACAA CAGCATTTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC    180
CATTTTTTGT TTTCTGAAGA CGGCCTTTT TTCTTTTTA TTATTATTAT TTTTAAAT    240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG    298

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT    60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG    120

```

```

AGTGGAGCCA GATTGAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA      180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG      240
ATTAATCTGA AAGGAGGTAA CTCGAG                                           266

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT      60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTGGTCCT      120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG      180
TTTGAGAAAGG TGA CTGATGG TGGTGAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT      240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCT TCATGCAGAA      300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAACCATA CCAGGGTCAA TATTACAGTG      360
TCTCTGAAAT AACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG      420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA      480
GTTGGGCAGT CAACTCGAG                                           499

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG      60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTAA AAACAATAAT      120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA      180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATT TTTGCGTGT GCTTTTCTTG      240
GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA      300
TAACTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC      360
CTATAGTACA ATTCCTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC      420
TCGAG                                           425

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAT GTGTCACTGT GTTTCCTTAG      60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG      120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA      180
CTAGAAGCTT CAGCCCGGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA      240
GTGGTGTCCC TTCCTGATTT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG      300
AATTGGGATC CTCTCGAG                                     318

```

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGGAAA      60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAAGTTAC      120
TATTAAGGAT TTGGAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA      180
TAACAACATT GAAGAATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG      240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA      300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGGCGTTTCG CTCGAG                                     346

```

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCGGCC TTCATGGCCT AACTTTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT      60
TGGACGTTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT      120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA      180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA      240

```

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT      60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC AACTGGGATA ACACACACAT ACACACCCAC      120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCCTCCT      180
CCTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA      240

```

CCCGCCGGCT CTCCCCCACC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC	TTCATGGCCT	AGAAAAGTCT	AGAAAATAGC	TTAAATAACA	AACACGTGTG	60
GATTGTGTTAG	ACCAAGAGCA	AGGGAGACCA	TTTAATGCAG	TTATTTAACA	ATATTTAGTA	120
CTTTCCTTTA	CCTTGTCTGC	TGTGCCATCA	TTCATGCCTG	TCAGTGTTAA	AAATCCCCAA	180
ATTTCCCAA	CAGATTTTCA	TTCACTTCC	GTCAACTTTT	AAATTAAGT	TTTTAAATTC	240
CTGTCCCCAC	TCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT	TTTGATGTCA	AAATGGAAAA	TGAAAAGTTA	GTTTTAGCAT	GTGAAGATGT	60
GAGGCATCAG	TTAGAAGAAT	GTCTTGCTGG	TAACAATCAG	CTTCTCTGG	AAAAAACAC	120
TATTGTGGAG	ACTCTAAAAA	TGGAAAAAGG	AGAGATAGAG	GCAGAATTGT	GTTGGGCTAA	180
AAAGAGGCTG	TTGGAAGAAG	CAAACAAGTA	TGAGAAAACC	ATTGAAGAAT	GTCTTGCTGG	240
TAACAATCAG	CTTCTCTGG	AAAAAACAC	TATTGTGGAG	ACTCTAAAAA	TGGAAAAAGG	300
AGAGATAGAG	GCAGAATTGT	GTGCGCCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC	TTCATGGCCT	AGTGCTTGAA	CTCACGCATC	TGTTTTACCT	GCATCTGCAG	60
GCGATGGGGC	AGGGGCCACG	GAAAGAGTCT	GAGGGCTGCT	TGGTGTAGTC	AGGTTGTGTC	120
CAGGCATGCG	GAGCTGTGAG	TGCCTGCAGG	AGAGACACCC	AGGAGGAGTT	TTTACATTTT	180
GGTCTAAAAA	GCTCTGGAT	TCATCTCATC	TCATGGAATG	ATCCTGTCGG	ATGACGCTGA	240
CGTGATTGCT	TCAGACTTAG	AGGTGAATAA	ATTGAGGTCC	AGAGAGGTCA	CAGTCACGAA	300
GCTCATGGTA	GACTGAGGCC	ACTAAACACC	CGTCTCCTGA	TTTTCAAGTG	CGTCTCATT	360
TGCATACACC	TGGGCCATCT	TGGTTTTGTC	AAGAAAATC	GAG		403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTAACTGCC      60
TTGGTGAGAGT CTTCTGATT TATTGAAGAG AATAATCACG AAAATAATTT TTGTTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTC AACCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCAG GTTCAAGTGA TTCTCCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTGTA TTTTATAGTAG AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCCT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAAACG CATCAGCAGC TTGACTCAAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCCT CCCCTTGTCCT GTGTGGTCTT      300
GACAACGACA CTAGTTCATT TACTAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTC AACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTGCGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGGTCAGCAT      60

```

```

TGGAAGCAGG GAGCAGAGTG GGGAAAACAG CAGTCTTATG GGAAGTGAAC AATGCCCAGC 120
GTGATCTGAC TCTATCTGCA AGGTAGTGTT GGAAGTGAAC AGGGTTGGAG AATGCCCAGC 180
TGGTGTCCAC CGCAGAATTG ATTTTCATGTT TGGTATGCAG GGACCCCCCA CTCCACACTT 240
AGTCACAGAA ATCTGTGTTG ATTGTTGTGG CATGAAAGCA GGGAAAAATA GTTTGTTTTT 300
TTCTCCACAC TTCCTTCCCA AGATCCCGGC TAACTCGAG 339

```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT ACTCACCGGA GAAAAGAAGT TTCNGAAGAA AACCACAACC 60
ATGCCAATGA ACGAATGCTA TTTTCATGGT CTCCTTTTGT GAATGCAATT ATCCACAAAG 120
GCTTTGATGA AAGGCATGCG TACATAGGTG GTATGTTTGG AGCTGGCAAT TATTTTGCTG 180
AAAACCTCTC CAAAAGCAAT CAATATGTAT ATGGAATTGG AGGAGGTACT GGGTGTCCAG 240
TTCACAAAGA CAGATCTTGT TACATTGGCC ACAGGCAGCT GCTCTTTTGC CGGGTAACCT 300
TGGGAAAGTC TTTCTGCAG TTCAGTGCAA TGAAAATGGC ACATCTCCTC GAG 353

```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA 60
AATCTCTGAT AAGTTTCTTT TTATCTAAAG GTTCCACTTT GTTCATTACT TTTGTGTTCC 120
TTATTATTGA TTTGTTTCGAG AACCTGAGTT TCTTGACCTG TGTGATTTTG TACCACCTGG 180
ACTTTCTGAC TGTGTTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTAAGTGGACT 240
CAAGCCATCC TCCGCGCTCA GCCTCCCAAG TAACTGGGAC TATGGGCACA CTCGAG 296

```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCCTA 60
CATATCTGCT ATTTTTTATC CTTTGACCTA CATTTTCCCA TTTCTCCCA GTGTTCTCTC 120
CCCAGGTAAT CATGTTTTTA TTCCCTTCT CTGTAAATTT GACTTTTTTT TTTGGATTCC 180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTC TGTGCTGGC TTATTTTACA 240

```

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```
GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT    60
AGCTGTAAGA TCGCTCTAA TATCACTCTC TGTTGTCATT TGCCTTTTCT CTGTGTCTGT    120
GTTCAAATGT CCTTTTTTTT TTTTTTTTTA GGGAGTCTTG CTCTGTTGCC CACTCAAAC    180
GCTGGGCTCG AG                                     192
```

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

```
GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTTCTGTTA CATTGTTTAG AGAATAATGA    60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT    120
TGAGACAGAG TCTCGCTCTT GTTGCCGAGG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC    180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCCTGCCT CAGCCCCCGG AGTAGCTGGG    240
ATCACAGGCA TGTGCCACCA CGCCCGGCTC TTTTGTATT TTTAGTAGAA CTCGAG        296
```

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

```
GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG    60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT    120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCGGACTA CTACAGGTGC    180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG        234
```

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

```
GAATTCGGCC AAAGAGGCCT AGAACAGTTT AGAAACAATT TCCCTGCCTT TGCTTTGGGT    60
TCCCTGTGAT TGTTCTCCAC ACTGTTTTC TGGCTCTATC TGTCTCCCTT GCCACGGCCA    120
CTCAAGCCTA GCTGCCCAAC AGCTCCTTCC CTGAAGAACC CCGGCCTTCA GGCTTGACAG    180
GTGATCTCAT CCCTCTTCTT TTCCTCCAGG TTGTTGTAGA CTCCACCTT CCCTTCTTCT    240
CCTGGTCCTT TCCCCTTCTT AGTGCCAATG TGGGCCACGC TTTCATCCCA CCTACTCGAG    300
```

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

```
GAATTCGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTTC AGCTAGGAAA ATGACGGTGT    60
TCAGAAAGTT AAAACTTCTT CGCTGGAAGG ATTCATCTT AAAGTTGGGA GACTGGAAGA    120
AATTAAGTG TTCTAAATGG AAGAGCATT ACCACATGTG TTCTGTTTG GGTGACATT    180
TAGCTTTTGT TTTTATTTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG    240
CCATTGCTAT TTTCTGCATT GTATTGTATC TTCGTTTTAG TAGTGCTCCA ATAAAAAGAC    300
CTGCTACTAG CTGCAAACT CGAG    324
```

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

```
GAATTCGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTTCTTATT    60
TTATTATACA AAAC TAGATT TGCTTAAAAC ATTTCCAGT CTCTTTAAAG GAATGCTAGT    120
TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTCAAGTAG TCCATAACTA    180
TAAAAATCGT TACGGCCAGG ATATGCCGGA ACAGAACACT CCCCCTGGG GTCCTCAGCC    240
TTGGATGTCA GCTCGGCCCC TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA    300
GTCTCGAG    308
```

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```
GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCCAA GAAGTTAGAG GAGATTCCCC    60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCCT GGACTATCAT TACCAGGAGA    120
TGCAGGCTCT GAAGGAGGTC TTCAAGGAGT ATTTGATTGA ACTGTTTTTC TTGCAACACT    180
TTCAAGGGAA CATGATGGAT TTCTTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG    240
CACCCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

```
GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA    60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC    120
ACCATTGAAA ACAGTCAGGA TTTGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG    180
GAATTTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAATGT AAGTAGACCC    240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAG AAAAATGAAA GATTTTTTTG AACACAGAT    300
TAATGTGATG AATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

```
GTTGTTAGGC TGGTGTGTTT ATGTTGCTGT TGTATGCTG GTCGTGCTGC TCCATGTTCT    60
CCAGGTGTTT TTCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG    120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCCCTCCAC CAAACCCCTC TGCTTCCGCC    180
TCCCCGTGTC TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCCA TTTCAGGGC    240
TCGAG                                     245
```

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

```

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA AAAATAGTGT TCAGCAAGGT      60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA      120
GACACAATCT GAAAAATGAAA TTAGAGAAAC AATTTCACTG GGCAACAAGA GCAAACTTC      180
ATCTCAAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATT      240
CCCATCCAAC GCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```

GAATTCGGCC TTCATGGCCT AAGGACATGG CAGAGTTCCT GCTAAAAGAG AAGACAGTTA      60
TTTAAGGAGG TTTGAGATTC AAGGGCTTTT TTAATTTTAA AATTAACCAT GGTAGAAACC      120
TGTGTGTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAAGGGGA      180
TAGCAAGGTG ACTGCACCAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA      240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTTGTA AAC TATAAGGGGC      300
AATACAAACA TGTAGTACAC CTTCTCTGAG ATCCGGGAAA GGACAACCTG AGCATAGGTT      360
GGGGCTGGTC ATAGGCCACT CTCCTACT GTTCTCTAG AGTGTGTGTA GTCCCTAGCA      420
AGTCTCAGAT GCCTCGACCT TCATGGCCTA GAGAGTTCTC ATCAGAACAG GAAGGCAGTG      480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACGAA GATCTCCGGA AAGTGAAGAA      540
GACCCGGAGG AACTAACCT CAACCTCTGC CATCACAAGG CAACCTAACA TCAACAGAA      600
GTTTGTGGCC CTCCTGAAGC GGTTTAAAGT TTCAGATGAG GTGGGCTTTG GGCTGGAGCA      660
TGTGTCCCGC GAGCAGATCC GGAAGTGGA AGAGGACTTG GATGAATTGT ATGACAGTCT      720
GGAGATGTAC AACCCAGTC GACTCGAG                                         748

```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```

GAATTGCGAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG      60
CGCTGCTCAT CGTTTGCGAC GTTCCCTCAG CCTCTGCCCA AAGAAAGAAG GAGATGGTGT      120
TATCTGAAAA GGTTAGTCAG CTGATGGAAT GGAATAACAA AAGACCTGTA ATAAGAATGA      180
ATGGAGACAA GTTCCGTCGC CTTGTGAAAG CCCACCTAA TCTCGAG                                         227

```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GAATTCGGCC TTCATGGCCT AGTATATATA TAAATACTG AGGATTAGG GCTGATGTAT	60
ATAAATAAAA TACTGATAAC TTTTTCCTT TCCTTTCTT TTTTITTTGA GATAGTGTCA	120
TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAAGTGCAG CCTGCCCCTC	180
CCAGGCTCAA GCAATCTCC TGCCTCAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC	240
CACCAAACGC ACCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

GAATTCGGCC TTCATGGCCT AATGAATTCT CATTCCTGG AGGCTGAAGA TCTGTGCAGG	60
TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT	120
TTTCTGTGCT GTGTTCCCTC TGAATTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA	180
CCAGCATGGC AGTGCTGGGC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTC	240
CTGTCCACA TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTTACC	300
CGAGCTATCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

GAATTCGGCC TTCATGCGGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA	60
GCTCCTCTAT CTTCTCTTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC	120
TTCTCTGCT CCACGCTGGC CACCGACTCC TGCAGCGCCG TGGGCAGCCG GGCCTCGCTC	180
TCCGCGCGGG TCTGCAGCTC CATCTCCAC CTCCTCCCGT GGGCAGCTCT CTGCGTCGAG	240
GCCGCCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCCTGAGAG	300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGAGT AGAAGATGGG GCTCCATGCC	360
CGGATTCTCG GGATTATTAC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

GAATTTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT	60
---	----

```

CCATTTCAAA AAAAAATCTT AAAAAACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT   120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA   180
TCTGGAAAGT GGTCAATTAT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT   240
GATACAGGTT CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG   60
GCAAATGGGA TGTGTCCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC   120
TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA   180
CTGCATGGAA TGTCACGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG   240
CCACGTGTGC TCTGTGGTCT TTGAACCTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT   300
GAAGGCCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG   360
ATTAGGTACT GGAATAGTC ATGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA   420
CGAGTGGGCG ACAGTGGCTC CTCGAG                                     446

```

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA   60
CTCATACTCT GGAATCAACT CATTGCACCT TCCTATATGT TTGGCCATGG GCAAAGCACA   120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA   180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT   240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA   300
CGGTGGCAGC TTTCTGGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT   360
CCGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGTCTCTGA AGAAGAGTTT   60

```



```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA      120
AGGACCCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG      180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG      240
GTCATTGGAG GATTTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT      300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG      360
AGACTATCCT TGTAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG      420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC      480
GAG                                                                                   483

```

(2) INFORMATION FOR SEQ ID NO:1201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGGTACAA ATTCACTGAC TTTAGTAA TTCACAGTTA      60
TATATTGATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT      120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT      180
CTACCGCTCG AG                                                                                   192

```

(2) INFORMATION FOR SEQ ID NO:1202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG      60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC      120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATTT GTACCTATAT      180
TCAGAAGAAA AGAGCAATAT TGGCACAAA CAAATCATCT TAATAAGGTA ACTAATTGGN      240
TGNGTGCACT GGCTCAGGCC TGTAAATCGCA TCACACTCGA G                                                                                   281

```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA      60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA      120
TAAATATTTC TTGTTTCCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG      180

```

TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTAA TTCCTCTTTG ATACCCTGAA	240
TAAC TAGCCT TAGAAACACA AGTAAAGCTC CC AAAATTC ATTTCTACA TATTTTATTA	300
CCAGATTGAA TTCTAGACCT GCCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA	60
TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG	120
TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTTTAA	180
CACTTGACAT ACTTATTGTC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT	240
TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTAAAGTGAT TTGGCCGGGT	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA	60
CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTAAATA AAAAAGAATA	120
CTTTGTATCT TTTGATGTAA CTTCCCTTTA GAGATTCTGT TTCCCTGTC TTAAATGTC	180
AGGCTATTTC TGATTGCTGT TTAATAAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA	240
AAAAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG	300
ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT	360
CAGTACTGCC CATCTTGGCA CTTAGGTTCT TGGAATACAG AGGTGGATAA GGTTCGCCCC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GTCGCGCTGC	60
TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC	120
CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG	180

```

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCACACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCC TCTAGGCCAT GAAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTAAAC TAATAATTTA ATCATTCTAG TAAGAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCACCC ACGACATTGT CCTAATTGT CGACTGTTCT GTGTGCTCTT TTAAGAAGG      180
TAGTCTGTTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                         242

```

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTAATTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CTTAGGCTCG AG                                         152

```

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTCCAGT CCATATCTTT GAACTTTTGG TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTCTCT      180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCTTGTG TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTTC ATTACCTTGA AGTTCCTGTC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTGA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCATGG AATGTTTTGC TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTAATCCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGT AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTTCT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGCTCG      480
AG                          482

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAATCGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCTT GCCACCATAA ATCTGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAAGATCT CATTATTCCA GGTGAGACA GCGTTTCCAA      180
TGCTTTCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CTTGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACATTT CTTCACTAG CTGTCTGTGC TTTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCCTC GAG                          343

```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

GAATTCGGCC TTCATGGCCT AGAGAACTA AACTCAGAG AAGTTAATTA CTGAACTCAA	60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT	120
AATGTATTAT TTATTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA	180
TAATTCCTTA TTATGTATTC TGATGTTGGT GTTTTCCCAG TTTTAGCCAA TGGCATCCCC	240
TTCCATCTGG ATCCTGTGTT CTTTGACAT GGCTCCAATC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGGAG CCATGTATGC	60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTTGTC CCATCATCGC	120
GCCATTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT	180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCTT	240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCCTGC GCCTGGGTAT	300
GAAGGCCCCC GTCATCTGAG	320

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GAATTCGGCC TTCATTTTGA AAGATATTTT TGTAAAAATC TGTTTGTTTT CTTTTAATAC	60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT	120
CATTCTCTTT AATATATTGT GTCTTTCTTT GTCTACATTT AAGATTTTAT CTTTATCAGC	180
TGTTTTGAAA AGTTTTATTT TGATGTGCTC TTTATGTTTT TCTTTATTG TAGTGCTTGG	240
ACCTTGTTGGT GCTTTTCTTA TTTATAATTT TCATCAAATT TGGGGGGTTT GACCATTATT	300
GCTTCAAAAA TAATCTCTGT TCTTTTCTT CACTTCTCC AGTTACATAC TGTAAGAGTAA	360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA	420
GAATGACTCC AGTGAACCA CTCGAG	446

(2) INFORMATION FOR SEQ ID NO:1216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```

GGACTTTTGG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA      60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTTTTTT TTTTGGGATG      120
GAGTTTCGCT CTTGTCGCCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA      180
GCTTCCTGGG TTCAAGCGAT TCTCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA      240
TACGCCGCCA TGCCCAACTC GAG                                         263

```

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA AAAAAACAT GTATAACTGG      60
GAAAAAAGTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT      120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT      180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA      240
TGTAACCTAA TTCAGCATAC TTGATGGTTG TGGAACCCCT AGAAAATGAC TCCAGGAAAT      300
AGGTGAGAAT CCAATCTATC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA      60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA      120
ACCACCGCGG AAGACTCATT CGAACTCGTG GGCTGAAGTC AACCAGGTCA ATGCTTCAGA      180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA      240
TATTAGGATA CAATCCAAA TGTCTCATCA TAAGAAGACA GGAAAACTC GAG                                         293

```

(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```
GAATTCGGCC TTCATGGCCT ACGAGGATTG GGGTAGGTAT GNGCTTNGG CTCATGTTTG      60
TGATGATAAC TGAAGTCTNT TGTGGGTCCG ACCTGTTGTA GGGTGTGGGG GAAAGTGAAG      120
GAAGAGAATG AAGGTGAGTC CCCGCCGTTG CAAACCTTCA CCAAACCACG CGGCCCAGTT      180
TTCGTGAGTA CCCCTGTGTC CCAGAGAGGA GGACCCAGCG TCCTCGGCTC TGCCGCAGGC      240
CTTCTTGGTC TGGTGGGTAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```
GAATTCGGCC TTCATGGCCT AAGGAATTGA AACCCAGTAC TTTGCAGAAC TTCTTATGAC      60
TTCTGGAGTG GTCCTCTGTG AAGGGGTCAA ATGGTTGTCA TTTCATAGCG GTTACGACTT      120
TGGCTACTTA ATCAAAATCC TAACCAACTC TAACTTGCCT GAAGAAGAAC TTGACTTCTT      180
TGAGATCCTT CGATTGTTT TTCCTGTCTT TTATGATGTG AAGTACCTCA TGAAGAGCTG      240
CAAAAATCTC AAAGGGGGAT CTCGAG                                         266
```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```
GAATTCGGCC TTCATGGCCT AGCTCATTCT GCTGGGGGTA GAGATGAGGG GAGGGAGTAA      60
GTTAAACCTT GGAAGTAGCA GTAGAAGCCT GGGGGGATGC GTGTGCCTCA GTTTCCTCCT      120
CCACAAGTGA ATATAGTGGC TGAAAAGTGG GGAGATACTT GATGGCCGCA ATGTCCGTTT      180
TCTCTCCCTT CCCACCTCCT GCAGGAAGCA GGACGGGGCA GGCAGCACCT GGTAGGCACA      240
GTGCTTTGCC CCTCCTCCCC TTCCCTTCTG GAAGTCTTGG GGCCTCAGTG CTTGCAACAG      300
CCACTCCTCG AG                                                         312
```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATTGTGCCC AGTCACAGAA TTCATTTTAT TGTGAAAAAT      120
ACAGTGGTAC AAGTAGGCCT TTGTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTCCC TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCCCCGGCCC      120
CTCCCTCCGG CTCCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATT      240
GTCTGTTTGT TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAG CCTATGAGGG TTTTTCAC GATTCCGTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGCCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTAG ATGCAAATAC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCTCTCTCG CTCGCGTCCT GTCCTGTAA CAAAGCCAAC AAGACAAGC      120
CACCGCATCT CGAG                                     134

```

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

```

GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT      60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGGAAGATAA AGAATGTCTC      120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG      180
TAACAGTATT GGAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA      240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA      300
TAAAAAGAAT GAGTTTGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC      360
TGTA CTCCA CCTGGAATGA CCCTCACC GG ATGCTGGTGC CATGCTCTTG GACTTCCCAG      420
CATCCAGAAC TTCTGTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA      480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGACTATGAA TTAGAAAATA      540
TCTGGGTTAG CTCGAG                                     556

```

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC      60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAACTACCA      120
CCTACTTCCC TCACCAAAGC CCATAAAAT AAAAAATTAT AACAAACCAC TCGAG       175

```

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60

```

```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC      120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GATTTAAAT TGCCTGTTGG      180
CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG                               220

```

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

```

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAG ACATCTCTAT      60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA      120
CAAGCACTTG CCAGCAGGGG GCACTCCAGG TTTCGCTCC GCTGAGTCAC CCAACCCCTG      180
AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA      240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA      300
ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGCGGAG AGTGGGGGTA      360
GGGTGGAGCA ATGTGGGCTA GGACCCAGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT      420
CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC      480
GACTAAACA AGCTCTCCA GGGCTCGGGC CAACTGTGCA CTCGAG                               526

```

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

```

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC      60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC      120
AGCATGATTC CAATAGAGAA GGCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC      180
CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA      240
AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC      300
TTCCCCCTCG AG                               312

```

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC      60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGCTCTGAA TGACCGGGTA      120

```

```

ACAGATCTTG TAAACCAACA ACAAACCCTG GAGGAGAAGA TCGGGGAAGA CCGGGATAGC      180
CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATTCCG CATTCAAGCT GGAGAATGAG      240
AGGCTGAAGG CCAGCTTTGC TCCAATGGAG GACAAACTCA ACCAGGCACA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG      60
AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT      120
GGAAAACCTG AAGACATTCC TGCCTTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG      180
CCTTTGGAAC CAGGGTTCAA TTACTGCAGA GGTATCTACT GCTGGCACAT AGGGCAGCCC      240
AACGAAGCCT TAAAGTTTCT GAACAAGGCA CGCAAGGACA GCACTTGGGG CCAGAGCGCC      300
ATCTACCACA TGGTGCAGAT CTGTCTGAAT CCAGACAACG AGGTTATGGT GCGGCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTAAGTGAAT      60
TTTTCCTGT TCTTCCAGG TGTGACAGCC TTTTCTTTTC TTCCAGGTG GTTCGCTTTG      120
AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT      180
CAGTTCTTGT TTTGTTTCTA CTGCTTTAGT TTTTTTAAA GTTCTCCAGT GTCCCAAGA      240
GGTATTAGAA TCTTGCTGTA CCAAGCAAG ACGTTAATT TTCTTTTAA TGTTTTGGGG      300
AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCCAAC      360
AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG      420
CAT

```

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

```

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTTA      60
TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA      120
ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCAGAGAG CAGACTTCCC TCACGGCTGG      180

```

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG	240
CACAAGCACG TGTTCTCACC TTTTCCTAT GCCCTGGACT AAGGTTTGGC CAGTGTAATC	300
ATATAAGGCC ATCCTGACAT TGTTCTGTG TTTCAAAATT TGGATTTTA TTTACATTAG	360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTTCCAT GGAGAACTAT	420
TTCAGCATAT TGCATGCTGC TCAGACCCCA AGTCAGATAT GCCACAAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GTTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTGAT CCTATTTGGT	60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT	120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAATCTT TTGTATGCCT	180
CATTGAATAT GCCAGGTAAA ATTTATGCAG TCAAGAATGA ATTATTTTTC TGAATAAAGT	240
GTGTAGCAGT AGTTCAAAT TGTGCCCTTG TTTTAACAGT TTCTGTCNAC ACCTTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT	60
GTATTTTAAT TTCTTGGTCT CCGAAAACTC AGCTGTGACT GCTTTCCATT AACAGTTCCA	120
GCTCTATGTG TTTCTCTAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCTAAG	180
AGTCTCCATG GAGTCTATT TACAACCTCC TTTCCCTCCA TGCTTCGCG GAGGAGTCTA	240
TACTATCTCT ATATACACAT TTAAACATT ATTCTTCATT TGAAATTCCT TCAATAAAAA	300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT	60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG	120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCTGG GGGCGGTCCC	180

```

ATGAGCCCCT CACAATTGGA CACAGTTTGG CAAAGGGGTA AAAGGACAAG AATCGGTAGC   240
TGTGACTGTG GATGAGCCTC TGAGCTTCAC TTCCCTCCC TGAAAGGGGG TGACAGTGGC   300
ACCTCCCTGG AGGTTTTCGT GGAGGGGAGG AAACACATGT AAAATACTTC ACCCC      355

```

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

```

GAATTCGGCC AAAGAGGCCT ACTAGACCTG ATCACCACGT TCAAAAGTTG GCTTTCTCCA   60
TTTTAAGTTC TTCCTTAAAG CCTCTTTAAG CAAAGTCCCT GAAATGATAC AGTAGAAAAA   120
TCACACAGAC TTATTTAAAA TGAATTCTAT CACTATTCCT GAGATCTCGC CTGCCCCACT   180
GAGGACATTT TGTTTTCGCA AAGTGCTTTG AAATGTGATA AAGGATCTTA AAGAATATTT   240
GTAAAATTAT GCCCAAAGAA GACATTCTTT GAGGTAACT TGCAGTGTCT AAAAGTCAAG   300
AATGAGGAAG GAAAGGAAAA TAACAGATTC ACTTTAAAT GGACCACGCT AATTGGGCAG   360
TGAAACATCC TTGTGTCACA CCATTTACCG TAGCAGACCA GAAGAGGGAA AAGGCTTGAT   420
TTTTCTCTCA TAGATACCAC AGTTCACCT CAAAAACATT CCTAAAATGG ATTGATATTT   480
CTCTGATAGA GCACCTGTTT TGCTACTGAC AGTGTTAAGT TCCATACTAA TCAGCTCATC   540
TAGCCTAACG ACAACTCGAG                                     560

```

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

```

GAATTCGGNC AAAGAGGCCT AAGGAGAANG AGGCTCAGAA GGAGACGATT AAGGATCTTC   60
CCAAGATGAA CCAGGAGCAG TTCATTGAGC TGTGCAAGAC GCTTTACAAC ATGTTCACTG   120
ANGACCCCAT GGAGCAGGAC CTGTACCACG CCATCGCCAC CGTGGCCAGC CTCCTGCTCC   180
GCATCGGAGA GGTGGGGAAG AAGTTCTCAG CCCGCACAGG CAGGAAGCCC AGGGACTGTG   240
CCACTGAGGA GGACGAGCCA CCAGCACCGG AACTGCATCA GGACGAGCC AGGGAGCTTC   300
AGCCCCCAGC TGCAGGAGAC CCCCAAGCCA AAGCAGGCGG AGACACACAC CTCGGAACAG   360
CCCCACAGGA GAGCCAGGTG GTGGTGGAGG GGGGCAGCGG CGAGGGACAG GGCTCACCTC   420
CCCAGCTGCT GTCTGACGAT GAAACCAAAG ACGACATGTC CATGTCCTCC TACTCGGTGG   480
TCAGCACGGG CTCCCTGCAA TGTGAAGACC TTGCAGACGA CACGGTGCTG GTGGGCGGGG   540
AGGCCTGCAG CCCCACAGCG CGACTCGAG                                     569

```

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC AAAGAGGCCT AGAGACCAGC CTGGCCAATA CGGTGAAACC CTGTCGCTAC      60
TAAAAATACA AAAATTAGCC AGGCATGGTG GCTCACACCT GCAGTCCTAG CTACTTGGGA      120
GGGTGAGGCA GGAGAATCAC TGAAGCTTGG GAGGCAGAGG TTGCAGTGAG CCAAGATTCC      180
ACCGCTTCCC TCCAGCCTGG ATGACAGAGT GAGACTCCGT CTCAAAAAAA CAAAAAAA      240
GTACTTCAA TAATGTACTT TTTTTCCTCA AATTACAGAT AATCTATAAG GAATTAATCT      300
TGAAATTAAT TCCAGGTTTA ATTGTTAATG AAATTTTACA AGCCTAATTT AACACTTGTC      360
TGGATAACTC ATTTTGATAC TGAGTAAATA GTCACCGGTC TCGAG                      405

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC AAAGAGGCCT AGGCTTTTG TGAATAAATT TTAAAAGAGA CTACTGCCTG      60
TCCTTAAATT CCTTTTCTT TTTATAAAAA AAGAACTATT AAAAAAGATT GACAAATTTT      120
GAGTTAAAAA ATTGTTAAAA CATTCTCTAT ATTTAATTTT AATTTTATAA TAGATTACAG      180
GAAGATGCTT ATGAAACAAA TACATTGTTT TCAGTACATG TCTTTAAATG ATAGACTTAT      240
AAGTATGTAA ACAACTATAT AATAAAAGGT TTCCAAACGC TGCCTGTAAG AAATCAGGCA      300
AATTTTACCA TAAGCAATAA ACCATTCCAA GCCTTCCAGA CAGTCTCCAT AGCCGCACCA      360
GCATGGCAAT AAGCTTTAAC CAAACGAAAA CAAACAAACA AAAGCACTTC GCAATTTGTT      420
GCTGCAAAAC AGGGAGAGAA AAGAGTGATC AAAGTTGATG GAATCACAAC AGTCAATATA      480
ATTTAAGGGA CAATAAAGTC AATAAGGTTG ATGGTGTTTA TTGTTTAAAA AGTTAGGCCT      540
CT                                                                542

```

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC AAAGAGGCCT ACTGATACAA TTGTTGACTT TTCTTTTACT ATGTGTAAGA      60
AATACCCCAA ACATGAAAAG ATTGTTTGA TCATATGCAT GTATGTAGAA TATTTTGGCA      120
GAGCAGAAAG ATTATGTTAG AAGTGTGATT TTTATTTTCA GAAGTCATAT ACATGTAAGC      180
TACAATTTTG AGTGCTTTAT AAACACTTAA GATATATATA TAAATTTTAA TTTCATAGCA      240
ACTTGTAATA AATAAAATAC TTGTTGAAAA GCCTTTTCA ACATATCCCT AAGCTAAGGG      300
AAGAGGAAGG AATAACAAC CAGTGAAAAG ATGGTCTCCA GTTCTGAAT GAAAAAGCTA      360
CAACCTCGAG                                                                370

```

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCAAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGTGACC	ATTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAA	AAAAACACA	TCTGCCCGA	ACACTTTCCC	ACTGTTATTC	TTTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTGAGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCACTGA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATTT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACGCC	CTTGCATGTG	TCAAATGTCA	120
TCTGATAACA	TGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTC	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGA	ACATTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAAACT	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCCCC TTGGGAATTG TTAAGTGTAC      120
ATGTATTGTG ATAACCTGCTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTTCG TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTCCCA AGACAGCTGG TTGTTAAAAA      360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTTGCCGT GTGATCTCTG CACATGCCAG      420
CTCCCCTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TCNGGGTGTA      60
GAACATTTAT TTATTTTCC CACAAATCAC TGAAAGTTTA GGTCAAGTGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCCACA TATCCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATTT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TAAAAATAA      240
CTCAAACACA AAAGGCAAGA TGAATAAAC TGTTTTTTTT TCTCAGAAA TCTCTACTCC      300
AGTGCCACACA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAT      360
TTCCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCCT TACTAGTGTC TTTTGGCTTA AATTTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTAGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGTCTTTTCC      240
CCTTGGTTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTCATTAA      360
CTTAGGCCTC TTTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```

GAATTCGGCC AAAGAGGCCT GTTGGTTTG TGACTAGACT TAAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTTGCACA CAAGATTTGA AAAAAAGTACT TCAAGTTTTA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCT CTGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```

GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAAA AGAGTTGAAG GTTGCTAATA      180
ATTTACTATG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTGCAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGCTCA GTTGTGCTAT TCATTATTA ACATAAAAC TTGGCGGTT TAGGCCTCTT      420
TGGCCGAA                                     428

```

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```

GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTCTAC ATATTAATA      60
CAATTTATGG TAATTGTGA AATGTTTTTC CATTTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACCAGTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTGGC CGAA                                     264

```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTGTG CCCCCCAT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC TGTGCTTTCA AACCAAAGTG TTCCCCCAA CCCCAAATTT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTTCTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTCTT TTAAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTTGAGGG AAAGGTCTCT GGGCAAGCAA GTGGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA

```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTCG AGACTGGCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGGTGGT GGGCACCTGT AATCCCAGTG ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACTCC ATCTCAAAAA AAAAAAAAAA      300
AAATTCCTTT GGGAAGGCCT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGTT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC AAAGAGGCCT ACCCGGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGGCAG AGGAAGAACG CAGGGAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATT CAAAAAATG ATGGAAGAAG CAAAAATTAA TCCAAGAGCA      180
ACTTTTAGTG AATTGTCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCGA AGACCAGAGG TGAGAAGGTA AGATGGTTTT AGTTCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTTCCTTG GATGAGAATG	60
AACTCGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGGG CCAGGCAACC AACAAAACCA	120
GCAACTGCGT GGTGNTGAAG CACATCCCCC CAGGCATCGT TGTAAAGTGC CATCAGACAA	180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAAATCCT ACAAGAGAAA GTAGATGTTT	240
TCTACAATGG TGAAAACAGT CCTGTTTACA AAGACAAACT CGAG	284

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGTCTGAAA	60
ATGGTCCTGA TGGGTATTAA TAGCCATCTG GAAAAATTTT ACATCTTCAC AAATAATCCC	120
AATAATTTAT ATTGTGAAGA TATTATCCTG ATAGTCCTTC TTTTCCTATA TTCTTGTCGG	180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAT CACAAAATTC	240
CCATTGCTTT GAAGCCTGCT ATTATTATAC TAAGCCTTCT TATAGCTTTA AAAATCAAAC	300
AATGCCAAAC AGTATATCTA ACATTTTAA TTTCTTTGA GCCAAACCAA TTTGGTTTAA	360
ATTTCTCTGC CTCCGTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGTCTAG GAGGGATGAC	420
CCCCTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCAAGA ACTCGGGGTG TCAGAGGGCA	480
AAGGAACTAC CTGCCTTTCA CGGCTGCTGA CTTCTCAGGG CTGCAAGCAG CACAGAATGT	540
TATCCTTACG TCCTGAGCCG GTTTAAGTCT GTGGAAAAGG AAGCACGGGA GAAATCCACG	600
TAACCTTTGC TTTCTTTTAA AGGGAAGCGG TTCCGCCGTG AACTTGGAAC CCTCAGCTCC	660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G	691

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCCAGC TGCCCCAGCA	60
GCTCCCGTCC CCCAGGGGAG GAGCCTGAGG GGAAGGGGA GACAGATCCG GAGAAGGTGC	120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCTGTCT	180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGA GTGGGAGAAC TTGAACCACT	240

```

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTCAATCGTG AAGAAATCCC 300
GGGACGCCAA GCTTGTGTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
AAAACATCAT GGAGTTTCTC GAG 383

```

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

```

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTG 60
CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG CACGACGATG ATGACGATGA 300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

```

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

```

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC 60
TCTGTCACCC AGGCTGGACT GCAACAGCAT GATCTTGCT CACCTCCGCC TCCCAGGCTC 120
TGGCAATCCT CCCACCTCAG CCTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
CCTTCGAG 189

```

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

```

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTTCTT AAGTTTTCTT 60
TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAAATTG 120
TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTC 180
TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGATA CAAGCATGGC TTGCTTCAGC 240
CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

```

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCTCA GGTGAGCAGC      60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC      120
AGGGAAAGCC GTTCCTTGCT CCTTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA      180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA      240
CAATTATACC CAGAAAGTCC TCGAG                                         265

```

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GGCCTCCCTA      60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGACTGG GCAGGACGCT      120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTGGCCTA CTAAGTGCTG      180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGA CTGAGCTCTG GTGGCTGAGA      240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGAGGTTGGT CACAGGTGGC CGAGACTGGA      300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCATTT GGCAGCTGTG      360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA      60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC      120
TGGCACCACA GAAGCAGGGC ATCCTTGGCT GACTTCTTCT CCTTGTGTC TTCTGTCTCC      180
ACACTGATGT CTTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT      240
CGGTGGTTTC CGTCCACAAT GTCATGGGAG CCCATGTTTT CCAAGTGAC TTTCTGCTCC      300
TTGAGGAACT GCAGTGCCTT GTCCACGTTT TCCAGGCAGT GGATCCGCAT GCGGCCCTTT      360
GTAGGCTTTG GCAGTATCTC TCCGAGAGC ACCTCGAG                                         398

```

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTGCCC	60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAACTTGTG TCAAAGCAGG GGAGACCACA	120
TGATCTTCCT CTTTGAAAT CTGTCCTGGG TGATGACCAT ATGCTCTTA AACAGGTTT	180
CTGTGTTTGA GGGAAAGAAG CTCAGAAAGG ACCCTGCTC TTTGATGACC TCCCTCCGGC	240
CAGCAGTAAC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC	60
ATTTTGCTA CAGTCCTACC TAGATTTTT TTTTATAGAT GGAGTCTGC TCTGTCGCCC	120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC	180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCAGCCTGG	240
CAGCTCGAG	249

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA	60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC	120
ATGGTGCACT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA	180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG	240
TCCTCTCCAT CCTCCCTTC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCTCGAGATT AGGGGGGTTA GACTCAGAAT	60
TCTGTCCAAA CTCCTGGACG ACCTCTTGAA ATTAAGTCAG GGATTTTATG TACTGGGTTA	120
ATTCGTAAC CTCTGGGTAT AATATTAGGT TTGCATGTAG AAAGGGTCTC CAGTATAGGA	180
CTTCAAAGAA ACTAAGCCAT AGACGTAATT TAAGGGCTGT TCTGATCTGA AGAAGTGCCA	240
TGGGTAGAAG TTTTAGCCAT GGTAAAGAGG CTTCTGGCA TCATTGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC TCATGGCCTA CTGGTCCAAG CTGATTACCC TCATAGTGC CATCATTGAG	60
GAAGACAAGA ATTCCTACAC TCCCTGCCTC AACCAAGTTC CCCAGGAGCT GAATGTGGGT	120
AAAATCAGCG CTGAAGTAT GTGGAATCTG TTTGCCCAAG ACATGAAGTA CGCCATGGAG	180
GAGCACGACA AGCATCGTCT ATGCAAGAGT GCCGACTACA TGAACCTCCA CTTCAAGGTG	240
AAATGGCTCT ACAATGAGTA TGTGACGGAA CTTCCCGCCT TCAAGGACCG CGTGCCTGAG	300
TACCCTGCAT GGTTTGAACC CTTCTCATC CAGTGGCTGG ATGAGAATGA GGAGGTGTCC	360
CGGGATTTC TGCACGGTGC CCTGGAGCGA GACAAGAAG ATGGGTTCCA GCAGACCTCA	420
GAGCATGCCC TATTCTCTG CTCCGTGGTG GATGTCTTCT CCCAACTCAA CCAGAGCTTT	480
GAAATCATCA AGAACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC TTCATGGCCT AGGCCCCCTGC TCCACCTGGG GGGACTGGGA GTGTGAGTGT	60
GCATGGCATG TGTGTGGCAC AGATGGCTGG GACGGGTGAC AGTGTGAGTG CATGTGTGCA	120
TGCATGTGTG TATGTGTGTG TGTGTGTGGC ATGCGCTGAC AAATGTGTCC TTGATCCACA	180
CTGCTCCTGG CAGAGTGAGT AACCCAAAG CCCCTTCGGC CTCCTTGTA CTGTTTCTT	240
TCCTTTTGT GTTGGTTTAA AAATACATTC ACACACAAAT ACAAATTGAC AGGTCAAAAT	300
CCATGAAATG AGATCCCCCA GCGGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGGCAAT TTTTCAGATA      60
CTACTTGATG TGACACCTCC CCTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT      120
TAACCTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTTACAGAC AGAGTAGGGA      180
GAATAATGAA AACTTTTGTG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAAGTGT      240
TCTTAGCTTT GTTTGCTACA ACTCTTCAAA GTTTAATTTT AGATTCAGTG CATTATTCA      300
TAGAGCATGA AACATATAAT CATGCCTTT ACTAATTGCG GATACTTAAA ATTATATATT      360
TTTGACCTAC TGTGTATGG TCAATTTGAA AAAGAATGGT TTGATTATAT ATTATTGTCT      420
GTAGATTCCC GTACTATTTC TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT      480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT      60
TCITTTCTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA      120
AAAAGATTG GGAATTTTA TTTATTATT TATTGTGACT TTTCATTTT TTGGTATTG      180
GCTTTACTGG AATAGGAGGG CCCCTGCCCA CTGTGCCCCG TTTATCCCTT ATTCCCCAAA      240
CCCTGCTCTC CCCAACACCT ACTCACTTAA GCACCTGTCC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CTGCCTCCA ATTGAAGAT TTATTCTCT CTTGGATAT AGAACAAAAT      60
AACTTTATGT ACATTTTATT TCACTTTATT TTAATTATT GTTGGTGCAA AACAAATTGC      120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCCAATATTT      180
TATTTTGAGA CAGAGTCGCA CTCTGTCAAC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC      240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTGT GCGTCAGCTT CATGTGTAAC      300
TGGAATTACA GGTGCACGCC ACCACGCCCA GCTAATTTT GTATTTTGTG TAGAGATGGG      360
GTTTCGCCAT GTTGCCCTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT      60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA      120
GTTTTGCTCT TCTTGCCCG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG      180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG      240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT      300
ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTTAAATAGG GTGGTCAGGG      360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA      60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTGTTG      120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTGG TGGTGGCATT GGAGTGAAGA      180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTTGGA      240
GAATGATGTA GTAGGGAAAG AGGAAAAGGG TGTAGGCATC TCGAG                    285

```

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

```

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT      60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATCTCTC      120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT      180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCTCCTTCC CCTTCCTCCC TCCCTTCTCT      240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG                    280

```

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

```

GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG      60
GTTAGTGTTA GCGTATTTTA TGTGCGGCCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC      120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCAC      180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

```

GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT      60
AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG      120
AGTACTCACT GTGTGAGTCC ATTTATTGTA AATTCTAGAA CAAAAATAA ATATCCATTG      180
ATAGAAATGG GAACAGTGTG GGCCTATGAA GAATGGAAAT TGA CTGGAAG GAGGCCTCTG      240
CTCGAG      246

```

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```

GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC      60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGAGC TGAGCCAAGA      120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA      180
GAAAGAAAAA AAGAAAATAA ACAAGAAAAA AATTAAGATT TTTGAAATAA AAACAAATAT      240
TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTACCT TTTAAAGGA      300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT      360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC      420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTC AAGGTCAAGC      480
AAAATAGCTT TCGTTCGAG      499

```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTC ATCTCCGCAT GTTGGAGCAG	60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATACAATTT	120
AATTGCTCAA CCATGCATTT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA	180
AACTGAAAAA AAATAAGAAA GAAAGAGTTG GATGAAAATG TGAAAGCCCA AGTTTAGATG	240
TGCATTAAGT ATTAAATAGC AAGTATCTT CTTCATGGAG CCTTTTTC TCCCCATCC	300
CCTGCAGCTA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC TTCATGGCCT ACTTCCTTTC ATTTTGAAGC AACAGTTTAT AAACAGGAAA	60
GTCTACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTG TCACTGGTTT CACGCGCGTG	120
GACTATATTC CAGTGTCTT AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA	180
AACAACTGCT GTAAGGTTGA GCATTTCATG ACCAATGACT ATGAAGGCAC ATTCACCAAA	240
CACAGGCACT TTAAGGGCAT CCTTGATTAA TTTGCTAATT GCTATTTTTT GTTGGTATGT	300
GAATTCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAA AGACAGAACA ATGGTAAAAT	360
GCAGCCCCCG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG	407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC	60
ATAAGCATGT AGTGCAGTTT TACCACTACT TCGAGGACAA AGAAAACATT TACATTCTCT	120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTTGAA AGCAAGAAAG GTGTTGACAG	180
AGCCAGAAGT TCGATACTAC CTCAGGCAGA TTGTGTCTGG ACTGAAATAC CTTCATGAAC	240
AAGAAATCTT GCACAGAGAT CTCAAACCTAG GGAACCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTGTGCC TTGTCTTAGT    60
TGTGCCCTTT GACTCAGCAA TCCCCCTTCT ATAAAATTTT CCCAAGCAGA TGATTATGGA    120
TATATGCACC AATTGGA AAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC    180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA    240
AAATCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT    60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA    120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA    180
TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT    240
AGAGAAGCAG TCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC    60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG    120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT    180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA    240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA    300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA    360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTGTCATA TGCAAATGTG ATTTACCTGA    420
GCCAAAAACT CGAG                                         434

```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```

AGCAATAATT ATTTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC    60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA    120

```

```

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT 180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT 240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG 300
AG 302

```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTTGTCTT AATGCTTTAT AATTTTCTAT 60
GCAGAGGTCT TGTAGATCTC TTTCCAAGAT ATTTGATGTT TGTTTGTTTG TTGTTTGTT 120
TGTTTTTTGA GACGGAGTCT CACTCTGTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG 180
GCTCACTGCA ACCTCCGCTT CCTGGGTTC AAGCAATTCTC CTGCCTCAGC CTCCCAAGTC 240
TCGAG 245

```

(2) INFORMATION FOR SEQ ID NO:1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG 60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTGA GGACCAGTAA 120
GGATAGAACT TTCTCTTATT TATGAAAAA AATGCTAATA ATTTGGGGC AGTTTTTTTC 180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTATTTTA GCTGATCTCG AG 232

```

(2) INFORMATION FOR SEQ ID NO:1288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC 60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG 120
GCAACAGAGT GAGACCTGT CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA 180
GTGTAGGGTT TTA AAAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACAGTA 240
TGGAAGTTTC CCTGAAGTT GGAAATTCAA TTTCCCCCTT ACCCCCCCAA CCCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA      60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG      120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA      180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG                      227

```

(2) INFORMATION FOR SEQ ID NO:1290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```

GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGTTT TTGAGCTGGA      60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC      120
CAGAACTTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC      180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA      240
AAGCTTCTAA TGGGAATACT CGAG                      264

```

(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```

GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA      60
CTTTGAATTT AAACATGCAT CTATTATTG TGTTTTTTGT TTTTGTTTT GAGGCAAAAGT      120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC      180
CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC      240
CGCCACCACG CCCAGGTAAT TTTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC      300
AGGCTGGTCT AGAATTCAAT CGG                      323

```

(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCTCTTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATG	CCTCCTCTGG	ATTTTCCAC	ACTCTGGGG	AACTTCCTGT	240
GACTCCCTGC	CCTCACCAC	CAGCCTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGTGATA	TCTGTCCCTA	TTAAATAAGT	GTTGTTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGCTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAAACTAC	GTTAATTTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTGTTTTGT	GTAAGAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCACCATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACTCCTG	GGCTCCATCT	TCCCGTTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTAA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTTAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTGTGTA	AAAGGAAGGA	GATTCTGTGC	360
TTAAATAGCT	TTAATAAAGT	TTCAAGTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```
GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATT 60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG 120
TATCATTTTC ATTCTTCATC ATTGTTTTAG TGCCTTTACT TCAATTCCTT CATTATTTGA 180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTAT TTTTGATAG TATTCTCCTT 240
TTCTTCCATT CCACTCGAG 259
```

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```
GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATT A ACACCTGAAC TCTGGGCCAG 60
CTTAAGTGTA TATTCTGTAA AAAATTTGAA ATCCCCCAA TGTCACATGC TATGACAGTC 120
ACTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT 180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT 240
CTGTGTGTC GCTCGAG 257
```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```
GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT 60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT 120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG 180
GAACCTCTAG TCCAATTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC 240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT 300
GTAGATGACC TTTGGCCCGT TCTCGAG 327
```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:


```

GAATTCGGCC TTCATGGCCT ACACTCTCAT GTTGTGTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTAGCCT TTAAGAAAGAA GGAATCCTG CCATTGGAA CAACATGGAT      180
GAACCTGGAG GGCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGAAC CCCTCGAATT CTGGATCTCC CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTGA GTATTATTTC TATCATTTC ATTGCAAATT      60
GTCAGTATCC CCTGCTACGT TTCTACTAAT TTACCATCGC TTCTTCAAAA AATGTGTTC      120
AGAGTGCTAC AATTTAGAC TTGAAATGA ATCACTATAA CTTTTAAAAA TTAGAGATT      180
TAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTAA AACCTCATG      240
AACTTTTAAA AAAGCCAGAC TCATATTAAG GCACACACCC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAAACA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCTTTC ACATAAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG                      292

```

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCTTTTCC      60
AAACACAGCA ATCAGGATCG CCTCTGCAAA GGATAGAAAA TGAAGTGGAA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCCA ACATTACCTC      180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCACGACG      300

```

```

CCAATACCAC CTCCCCCTTA TCATCCCAGC TTA CTGCCAT ATGTGTTATC AATGCTTCCA 360
GTGCCACCTG CAGTGGGCCC AACTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA 420
GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA 480
CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA 540
TCCTCGAG 548

```

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT 60
TCCGCTGCTT CCCCATTTTC CTTCTGTCCT TTTTCTCCTG CTCCTTGTTT TCCCAGCAGC 120
ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG 180
CTGCGTCATT TTTCTTTTGC TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT 240
CCTTTCATTC CCTCAGTGCT TCTCTTCTGA CCTGCATGTT GAGTTCTGTA TTGCTGGGGC 300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC 360
TGTGATGGAT ATAGCGATCT CGAG 384

```

(2) INFORMATION FOR SEQ ID NO:1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA 60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG 120
ACCTGCCTCA AGAGCTCGAG 140

```

(2) INFORMATION FOR SEQ ID NO:1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT 60
TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTACTCA 120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTCA TTTAATTCTC 180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TTGAAACTGA GGCTCAGAGA 240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAAGTGA AAACCTACCT 300

```

GTGTCTGACC	ACCAGTTCGT	GTTCTGACGG	CAGGCTAGTC	TGCATCACAG	AGTGTGGAGT	360
AGATGGTGCA	TGCCTGCTAG	GATGGGCTAG	GTATCACTGT	AGGTAAGAAA	CAGCCCCAAA	420
CTATGGAAAT	GTACACCACC	GAAGGCTCTT	TTCCTGCCCC	TGCTGCACAT	CCTCCATGGC	480
TCTCCTGTGC	CCTGTGCCCC	ACATGCCCTC	ATCCTGCCAC	GAGAAATAAG	GAGCAGCCTC	540
CATATGGGAG	CTGTCAGCTG	CTCTAAGAGA	TGAAGGAGAG	AGTGGCCCGT	CTCAATGGCT	600
CCCAACTCTT	CTGCCTCGAG					620

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGCT	CAATGTTTTC	CAAACCTATT	TGACCCCAAA	60
ACCTTTTTC	TATACCCAAT	AATAAGCTAC	AGAACTAATA	TCTGCAAAT	GTCTCTTGA	120
ACACACTGCC	TTAAACAGAT	ATTTCTATAG	CTGTCAGTAT	AGTTATGTTG	CTCCCAAGCC	180
TAGTTATCTC	CAGTTGTTT	AAGGGTGTTA	TGAAAAATTC	TTAAATATA	TATGAATTG	240
TGTAACACAC	ACAGAGACAC	ACACACATAC	TACTTTAAGG	GGGTGAGGAT	CATTAATTCA	300
GATAATTTT	AAGTTTCCTA	GTGATTCTCA	ATCTCTTGA	ATTTTACTTA	CATTTACACA	360
CACACGCACA	CACATATGTA	TATACACATA	TCATTTTAAG	AAGCTGAGGA	TCACTAATTC	420
AGATAATGTA	TAAGTTTCCC	AGTGATTCTC	AACCTCTTGA	AATTTTACTT	ATAATTACAT	480
ACACACACAC	ACTGCTACTT	ATATAAATGT	TCTCATGTAA	TCATGGTAAC	AGCTCAAATT	540
CCCAAAGCAA	GGGAAGACTT	CTCATTTGCA	GTTAAACCTG	TTAAACATG	AAAATATTCA	600
TTGAGCCTAG	TTCCCTTGTA	TAAAATACAA	GAAATAAGAC	ATTCAGGCAT	TTTCCCTTTA	660
TGAAGATGTT	CAGTCATCCT	TTCCCTGAAC	TACAATTAGG	AAAAGTATAT	GTCTTTTATC	720
CATTGAAGTT	CTCGAG					736

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	ACAGCAATAT	GCATCTTGCA	CGTCTGGTCG	GCTCCTGCTC	60
CCTCCTTCTG	CTACTGGGGG	CCCTGTCTGG	ATGGGCGGCC	AGCGATGACC	CCATTGAGAA	120
GGTCATTGAA	GGGATCAACC	GAGGGCTGAG	CAATGCAGAG	AGAGAGGTGG	GCAAGGCCCT	180
GGATGGCATC	AACAGTGGAA	TCACGCATGC	CGGAAGGGAA	GTGGAGAAGG	TTTCAACGG	240
ACTTAGCAAC	ATGGGGAGCC	ACACCGGCAA	GGAGTTGGAC	AAAGGCGTCC	AGGGGCTCAA	300
CCACGGCATG	GACAAGGTTG	CCCATGAGAT	CAACCATGGT	ATTGGACAAG	CAGGAAAGGA	360
AGCAGAGAAG	CTTGGCCATG	GGGTCAACAA	CGCTGCTGGA	CAGGTTGGGA	AGGAGGCAGA	420
CAAACGTATC	CATCATGGGG	TCCATCACGG	GGCCAACCAG	GCGGGAAGTG	AGGCAGGGAA	480
GTTTGGCCAG	GGAGTCGACA	ATGCACTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC AAAGAGGCCT AATTTTCCC CACACCACAC CACTGTCCTC TGTGCCTGTG	60
GAAACCACTC AAATGCCTCT CCCCAAGCCT TCTTTCAGTA ACAACCATCT CATCCGGTTG	120
ATTACTGTAG CTTTCGGCCT GTATAACCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATTT GAGGAGGAAA GGCACAGCCA	60
TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT	120
TCTGTCACTT ATTTGTTTTCAT TCAGCAGAAA GTCACGTAGA GCCTTCTGTA CACCAGGCAC	180
AGTGTCTGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGGCCAGACC TTGCTGTTTG TCTGCAGCCT CTTCCCTCAG GCAACTTGGT	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG	60
AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA	180
AACTTGCAGC TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCCGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAATATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGC G TTCTGTTTAG CATGCTATCC TGTGTGAAAG AAAGTCAAAT CCAATATTAT 60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCCTC AAGATGTCAG CAAAATGTGA 240
TACATAGCAA TCTTGTGTGA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

```

GTTCAAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC      120
CTCCCAGCCT TTGCCTTTT TTTT TTTT TTTT TTTT TTTT GGAGGAGAAT TAATTGATAC      180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG      240
GATTGAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG                292

```

(2) INFORMATION FOR SEQ ID NO:1314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC      60
AAACAGATCT TCACTAAGTC CTAAGTCTGA AAGACAAAGA CGAGGAGAAT ATCTTGAAAG      120
CAGTGAGAGA AAAACAATC ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT      180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC      240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTAGTAAAG ACATTCCTCG      300
ACCTTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG      60
TATTTT TAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGCTCTCAAA CTCCTGACCT      120
CAGTGATCCA CCGCCTTAG CCTCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC      180
CCGGCTGGGA AACATTTTAA AAACGGCGCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC      240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC      300
TGGCTTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG      360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAATGAC      420
TGTTCAATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG                469

```

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA      60
AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAACA AAAGAGACAA AAATAGTAAC      120

```

CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCATGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGTGTA TATTTGAAAG TAAAAACGT TATCTTACAT ACATAGATCT	300
TAAAAACGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCTGGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATTCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGAATTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAAGTCTTA	60
CTTTTCCTAC AAAACCCTAC CCACATGGCC CTTCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCTGTCAT	240
GTAAGTTGGT TCTCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGAACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CACGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT ACACTACGGT ACTCCCAGCA TATCACCCCTT AATGTAACCT      60
TAAATAACAT GGCCATTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT      120
TTTGAAAAAT TCTAAATATG TCTAGAAAAA CTTTTCTTTC TGTTCCATTC TCCTTCCTAT      180
TCTCCATGAC CCCCTCCCCG CGGACTGTAT CAGGTACAGC CTGTTGAAAA TCCAGCACCG      240
CACATTAGGC ACACCAAGTG TAAGTTTACT TGTGAGTTA TCACCTTTTT TTTCTTTTA      300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA      360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTTT TGTGATATGC ATGCTGTGGC      420
CTTGGTAGTC TCTCCCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG      477

```

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG      60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA      120
TGTAAGTGGC CCGACATGTG GTCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG      180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TGCGTCCAT CCTGGCAAC      240
AGAGCAAGAT CATTCTCAA AAAGAAAAAA AAAGCCATCT CGAG      284

```

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAAATGT GTGATTGGGA AAGAGGCAGC TTTTAAAAAT      60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT      120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TGTTTATCA TTTACAAAAA      180
GAAAACATCT GAAAGCCCAA CAAGACGGAA CTGGTTATTC CACATTGGCA CATTACATA      240
AGGCAATGCT CGAG      254

```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGGAAA GGATTGGTGG TCGTACATCT      60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGGTGG TGTTGATGCA GTGTTGACTT      120

```



```

GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA    180
GAGGTTGGTG CAGGGAAACT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG    240
TCTGCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT    300
TGAGTGTCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA    60
TTATTCCAGT ACTTTGACTG CTAGTATTGC TGTGAAAAG TCTTAATTGC CCTTCCTTTG    120
TAAGTAATAA CCCTTTTATT TGGCTGTGTT AAGCCTTTTT TTTTCCTTCC CATTAGTAGT    180
TTTGCACTTT TGTATAATGT ATTGAGGGCG TTATTTTTTT CATTCCATCA TTTTATTTTT    240
TGTAATCCCA CTGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGTCCTTG    300
AATAATTGTG GAAAATTCTT AACCATTTAT TCTTTGAATA ATGCCTCTTA TTTTCTCCTT    360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCTT TTCATCCTTT    420
TTCGTCTCCA CATACTCGAG                                         440

```

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAAATGCC AGTTACCTGA    60
AATTGTATAA ATTCTTGCCA AAAGTGTGTT AACTTAATAC AAACCTCCCA TCTCTTACCT    120
CTTAGCACTG TGCTCATCTT GAGGGGACAT AGTCCCAATT TTGTATTTTA TATAATACTG    180
TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA    240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG                                         280

```

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```

GTTTCCTTTT CTACTTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTTCTT    60
TGAGACAAGC CATTGTAAAT TGTTACTAGA CTAAGTAGTA GTATACCACT CATTGACTGG    120
TCTTTTCAAC TCCACTCAAA TTTGTAAAAA GCAATTCCTC TTATACTATC ATCTTTTGTG    180

```

TTTTTTAAGG TTTTGTGTGT TGTTGGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAAC CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTGAATTTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTGGGCT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGTAAATTG 300
 ATTGAGCTAT CTGTACAACC CCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAAGGACT TCAAACTCTA 120
 CTCCCACTAA TAGCTTTTGG ATGACTTCTA GCAAGCCTCG CTAACTCGC CTTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTGTGTA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGGAAAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGCGG CCGCGTCGAC TGCTACTGAG CTCTTGGCT CTCTTATATA TATTCTTTAT      60
TGTCATTAC TTTGGTGGAC GAAGAGAAGG AGAGAGTTGG AATTGGGCCT GGGTCCTCAG      120
CACTAGATTG GCAAGACATA TTGGATATTT GGAACCTCTC CTAAATTGA TGTTTGTA      180
TCCACCTGAG TTGCCAGAGC AGACTACTAA AGCTTTACCT GTGAGGTTTT TGTTACAGA      240
TTACAATAGA CTGTCCAGTG TAGGTGGAGA AACTTCTCTG GCTGAAATGA TTGCAACCT      300
CTCGGATGCT TGTGAAAGAG AGTTTGGCTT TTTGGCAACC AGGCTTTTTC GAGTATTCAA      360
GACTGAAGAT ACTCAGGGTA AAAAGAAATG GAAAAAACA TGTTGTCTCC CATCTTTGT      420
CATCTTCCTT TTTATCATG GCTGCATTAT ATCTGGAATT ACTCTTCTGG CTATATTTAG      480
AGTTGACCCA AAGCTCGAG                                         499

```

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 200 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGCGG CCGCGTCGAC CGCTGCCAAA TGCTTCACTC CTATCTACTC TCCCGATTCC      60
TTATACTTCT GAACCTCTC AACAGAAATC TTGCTCTCTC CCTAAATCCT CAGTGCAACA      120
TACGTCCGCA AAAACTAAAT GATCCCTCCT CAGCCAGACA GAAACTCTC AACATATCAA      180
CACTCCAAG GCGTGGACAG                                         200

```

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTCGGCC AAAGAGGCCT ACAGTCTTTT TAGGCATGTT TTTTTTTTTT TTGGTGTGTG      60
TGATGACAGG AATATGCATT TTATCTGTAG TGGTTTTTAA TCCTGTATTA AGCGTTGTTT      120
TCTTTTCAGA CTGCAAAATT CAAAATGGGG CTCTCGAG                                         158

```

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 552 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

GAATTCGCGG CCGCGTCGAC GATCATGAAG CGCTCGGTAG CCGTCTGGCT CTGGTCGGG      60
CTCAGCCTCG GTGTCCCCCA GTTCGGCAA GGTGATATTT GTGATCCAA TCCATGTGAA      120
AATGGAGGTA TCTGTTTGCC AGGATTGGCT GATGGTTCTT TTTCTGTGA GTGTCCAGAT      180
GGCTTCACAG ACCCCAATG TTCTAGTGTT GTGGAGGTG CATCAGATGA AGAAGAACCA      240

```

```

ACTTCAGCAG GTCCCTGCAC TCCTAATCCA TGCCATAATG GAGGAACCTG TGAAATAAGT    300
GAAGCATACC GAGGGGATAC ATTCATAGGC TATGTTTGTA AATGTCCCGG AGGATTTAAT    360
GGGATTCACT GTCAGCACAA CATAAATGAA TCGAAGTTG AGCCTTGCAA AAATGGTGGA    420
ATATGTACAG ATCTTGTTGC TAACTATTCC TGTGAGTGCC CAGGCGAATT TATGGGAAGA    480
AATTGTCAAT ACAAATGCTC AGGCCCACTG GGAATTGAAG GTGGAATTAT ATCAAACCAG    540
CAATCCTCG AG                                                    552

```

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

```

GAATTCGCGG CCGCGTCGAC CTCAGAACTA TTAAATTTA GTTAAATTAC TATTATATTT    60
TATAGTAAAT ATTGGTCCAC TTTATAGCTC AGAACCTAAA AAGAGAATAT GTACCCAAAC    120
TTCTCTATGT TTACAACCAA CCCAGAGTTT AAGATTCTGA ATTGTGCTTT GTTTTGTTAA    180
AAATTTAACC AAGGGTCAGG CACAGAGGCT CATGCCTATA ATCCCAGCGC TTTGGGAGGC    240
CGAGGCGGGT GGATCACTTG AGTTCAGGAG TTCGGGACCA GCCTGGCCGG CATGGTGAAA    300
CCCCGTCTCT ACTAAAAATA CAAAAGTTAG CCGGGTGTGG TGGCATGTGC CTGTGGTCCC    360
AGCTGCTTGG GAGGCTGAGG CAGGATAATC NCTTGAACCC AGGAGGCAGA GGTGTCANTT    420
GCAGTGAGCC GGGATTGTGC CATTGTACTC CAGCCTAGGC AACAAGAGCG AAACCTCTGTC    480
TTAAAAAATA AAAAGAAAAA AAAATTAACC AAGGTTCTCC TTTCTCTAAA TCTAGCAATT    540
TGTTCTATTT TTCAGAAATA AACTTAATAA TTTAATACA GATTTTAGCT TTGGCTTTTT    600
TCTTACTTTT TAGTTTGCAA ATTATTTTAT GGTATTCTTA CAAAGTAGAT ACAAATTTGC    660
ATTCAGAATG CACCTTTTGT TTTTCTGGGT TTTTGTGTTT GTTTGTTTGT TTTTTCAGAA    720
AACTCATGGA AAAGTACACT GTTCACCTCA GCATCTCGAG                    760

```

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

```

GAATTCGGCC AAAGAGGCCT ANAACTGGGT AAGGAGCAAA AAAAGTGACA GAGGCCAGGC    60
GCGGTGGCTC ATGCCTACAA TCCAGCACT CTGGCCAAAT ATTTGATTTT AAATTTCCAT    120
TGTTACTGAT TAAAAAATAA AAAAATCTGG ACCAGTTAAC CTGGAGATT AGAGGCTATA    180
GACACAATTT AACATCCATA CAGGCCTGTG AACTTCATGC AGAGAACAAA CAAACAAACA    240
AAAACTCTAA TTCAGAGTCT CTCATTTCAG CTTAGCCAAC ACATTGGAG ACTTAGGGGC    300
CAGTTCTAGA AGCTGCTTTT ACCTCTAGAC TCGGAGGGGC AGGCCCTGTC ACCGAAGGGA    360
GGAAAACTCT TCTTGGCTGT CAGCCGGAT TGAAGCCACT TCGCTTCCC TGGCCCCAGC    420
TTTCCTGCAC TCTTTTCACC GTGTCTGACA CAGGGCAAAC CACCAACCAC TCAAATGAGC    480
AAACAATTCC AGAAAAAGA ATCCGAGATA AAGAATAACC AACTAGGAGT CTTTCCATTG    540
TAGCCTAAAC CGTCGATTGA ATTCTAGACC TGCTCTGAG                    579

```

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGCGG CCGCGTCGAC CAACAAGGGC AAAGGCCTTG AGACACAAAC CAACTGTGTG	60
GGTGTAAGG TAAGAAAGGC CAGTGAGGCC AGCATGATGA ACTGGGGGAG CATGGTGGCT	120
GATTTGGTCA GGAAGGGAAC AGAAACCAGA CCACTTGGGA TCTTCTAGCC AGAGTAAAGA	180
GACTGAGTTT ATTCCTATG TAATGGGGAG CTATTCAGAG AGGTTAATCA TGAAGTGAT	240
GTGACCTGAG CTACACTCTT AAAAGATGCC TCTGGCTGCT GTGTGGAGAA TGAACCATGG	300
GGGCAAAAGC AGAAACAAGA AGACCACTTA AGAGGCTCTT GCAATAATTT ATGTGAGAAG	360
AGTGATCATC TTGACTAGGG TGGTGGTGGT AGAGGAGGTG AGTGGTGGTC AGGACTGAGA	420
GGAGCCAACA GAATTTGCTG GCTTGCTTGG ATGTGGGTGA TGAGGCAAAC TGAGAATCCA	480
AGATGGCACC AAGGCTTATA CCCTGAGCAA CTGAAGTCGA G	521

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTCGCG GCCCGTCGA CGCTCTTGAG TGAGACCCAA CAAGCTGCTT TTCACCAAAT	60
TGCAATGGAG CCTTTCGAAA TCAATGTTCC AAAGCCCAAG AGGAGAAATG GGGTGAACCT	120
CTCCCTAGCT GTGGTGGTCA TCTACCTGAT CCTGCTCACC GCTGGCGCTG GGCTGCTGGT	180
GGTCCAAGTT CTGAATCTGC AGGCGCGGCT CCGGGTCCTG GAGATGTATT TCCTCAATGA	240
CACTCTGGCG GCTGAGGACA GCCCGTCCTT CTCCTTGCTG CAGTCAGCAC ACCCTGGAGA	300
ACACCTGGCT CAGGGTGCAT CGAGGCTGCA AGTCCTGCAG GCCCAACTCA CCTGGGTCCG	360
CGTCAGCCAT GAGCACTGC TGACGCGGGT AGACAACCTC ACTCAGAACC CAGGGATGTT	420
CAGAATCAAA GGTGAACAAG GCGCCCCAGG TCTTCAAGGT CACAAGGGGG CCATGGGCAT	480
GCCTGGTGCC CCTGGCCCGC CGGGACCACC TGCTGAGAAG GGAGCCAAGG GGGCTATGGG	540
ACGAGATGGA GCAACAGGCC CCTCGGGACC CCAAGGCCCA CCGGGAGTCA AGGGAGAGGC	600
GGGCCTCCAA GGACCCAGG GTGCTCCAGG GAAGCAAGGA GCCACTGGCA CCCAGGACC	660
CCAAGGAGAG AAGGGCAGCA AAGGCGATGG GGGTCTCATT GGCCCCAAAG GGGAACTGG	720
AACTAAGGGA GAGAAAGGAG ACCTGGGTCT CCCAGGAAGC AAACAGAGAC TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTTAG ATGTACAGAT AGAGGTATGA TTTTTTAAA AGGCACCTCA GTATGGGTAA	60
TGTTATCTTT CTTGTGTTTC AGTGACACA CATACACACA CACCATAGAT GCAAAGTGTG	120
TAGAAAATGT ATTGAAGGAT ACCCAGGTAC TCGAG	155

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```
GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTCTCTC TTTTCTTCC AGTTTATGTT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                     138
```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTTGAATC GAACATTTC TCTTCTGGCT TTGTTCCGAT GGTTCCTGGT    120
CTGTTTCTTT CTTGCTCCCT CGTGGCTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC    180
CTCTCATTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTGTCTCG GCGATCCCGG    240
TTACTCGAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```
GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG               108
```

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 652 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

```

GAATTCGGCC AAAGAGGCCT AATAGAAGGC ATTCCATATT TGTTCAATGA ATTAACAAAT      60
GTTTTTCATA TTAATTGTTC TGATTTTAC CTCCTTAGGC CAGCCTTTAT TATGCCATA      120
TAAGCCTTCT GGTAGTACCA AGATGTATTA TGTTCACAA TTAAGACAAA TTCTCCATC      180
TCCGGATTCC AAATCAGATA CCACCGTTGA AAGCTCCCAT TCAGGATCCA ATGATGCCAT      240
TGCTCCAGAC TTCCAGCTC AGGTGCTAGG CACAAGAGAT GATGACCTCT CAGCCACTGT      300
TAACATTAAG CATAAAGAAG GAATCTACAG TAAGAGGGTA GTGACTAAGG CATCTTGCC      360
AGTGGGAGAA AAACCTTGC AGAATGAAAA TGCAGATGCC TCAGTTCAAG TGCTAATCAC      420
TGGGGATGAG AACCTCTCAG ACAAAAAACA GCAAGAGATT CACAGTACAA GGGCAGTGAC      480
TGAGGCTGCC CAGGCTAAG AAAAAGAATC TTTGCAGAAA GATACTGCAG ATTCCAGTGC      540
TGCTGCTGCT GCAGAGCACT CAGCTCAAGT AGGAGACCCA GAAATGAAGA ACTTGCCAGA      600
CACTAAGCC ATTACACAGA AAGAGGAGAT CCATAGGAAG AACGACCTCG AG              652

```

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

```

GAATTCGGCC AAAGAGGCCT ACGTGCCATT TCTCTCCAC TATGAGAGGA CCGATTGTAT      60
TGCACATTTG TCTGGCTTTC TGTAGCCTTC TGCTTTTCAG CGTTGCCACA CAATGTCTGG      120
CCTTCCCAA AATAGAAAGG AGGAGGGAGA TAGCACATGT TCATGCGGAA AAAGGGCAGT      180
CCGATAAGAT GAACACCGAT GACCTAGAAA ATAGCTCTGT TACCTCAAAG CAGACTCCCC      240
AACTGGTGGT CTCTGAAGAT CCAATGATGA TGTGAGCAGT ACCATCGGCA ACATCATTA      300
ATAAAGCATT CTCGATTAA CAAAGAAACC AGCCTGGACA AGCTGGGCTC ATGCAACAG      360
AACGCCCTGG TGTTCCACA CCTACTGAGT CAGGTGTNCC TCAGCTGAAG AAGTATTGG      420
TTCCAGCCAG CCAGAGAGAA TATCTCNTGA AAGTGGANTT GCCAAGGCCA TGTTAACCAT      480
TGCTATCACT GCGACTCCTT CTCTGACTGT TGATGAAAAG GAGGAACTCC TTACAAGCAC      540
TAACTTTCAG CCCATTGTAG AAGAGATCAC AGAAACCACA AAAGGTTTTT TGAAGTATAT      600
GGATAATCAA TCATTGCAA CTGAAAGTCA GGAAGGAGTT GGTGTTGGAC ATTCACCTTC      660
ATCCTATGTG AATACTAAG AAATGCTAAC CACCAATCCA AAGACTGAGA AATTTGAAGC      720
AGACACAGAC CACAGGACAA CTTCTTTTCC TGGTGCTGAG TCCACAGCAG GCAGTGAGCC      780
TGGAAGCCTC ACCCTGATA AGGAGAAGCA CCTCGAG              817

```

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```

GAATTCGGCC AAAGAGGCCT AGCACCATGG ACAACCCACA GGCTCTGCCA CTCTCTCTAC      60
TCCTGGGGAT CCTCACCCTC AGAGCCTCTT CTGGACTTCA GCAAACCAAC TTCTCCTCTG      120
CCTTCTCTTC AGACTCAAAG AGCTCTTCCC AGGGGCTGGG TGTGGAAGTT CCCTCCATCA      180
AACCTCCAG CTGGAAGTT CCAGATCAGT TCCTGGATTG AAAAGCCTCT GCTGGAATCT      240
CTGATTCCAG CTGGTTTCTT GAGGCCCTGA GTTCCAACAT GTCTGGGTCC TTCTGGTCAA      300
ATGTTTCTGC TGAGGGCCAA GATTGAGCC CGGTTTCCCC CTTCTCTGAA ACCCTGGTT      360

```

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTTAA GACCCCAGCT TCAAACATTT CTAACAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60
AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACTCCATC TTAGCAGGAG 180
ATCCCTTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT 240
GCAAGCTCAA TGAACAACA TGTGTAAAC TTGAAGATAG ACAAACAAGT TGAAGGAAG 300
AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCAAGT GCTTCCTAAT GACAATGGGN 360
TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCATTG AAAGCCACTC AACAACTCTT 420
TATGTGACAG GAAAGCAAAA TGAACCTCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480
GATGCTCACC TTAAGAGTGA GCAAACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540
CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600
TCTGAAGTTT ATTCTAATCC ATGCCTGGAA GAAAACAAAC CAGGCATTGT TTATGCTTCC 660
CTGAACCATT CTGTCATTGG ACTGAACTCA AGACTGGCAA GAAATGTAAA AGAAGCACCA 720
CTCGAG 726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTTTAGG 60
TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTTAC 120
TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180
TTGGCTTCCA GATGATGTTT ACAGTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300
TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360
ACTCAAATG AATCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATTCCAGGA 420
AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTCTT GCTCCACCT 480
CGAG 484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG	60
AAATAGGATT ATGTGGGCTG GGCACAGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC	120
TCGAG	125

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC	60
TACTGTGTGT GGATTCAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA	120
AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTTAGAAC TGAAGAAGT AGAAGCAGCA	180
GCACTGCTTG TCCAGGAGGA AGAAACTGCA TTTAAAGCAG CCCATTCAGT TTCTGGGCAG	240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTGGGAG ACTCAGACAG CAGCGTGTCA	300
TCTGGAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT	360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT	420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA	480
CTTGCCCTCT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA	540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT	600
ATTGAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT	660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCTTC ATTTTCACTT	720
TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG	760

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG CCGCGTCGAC CATTCGAGA GTCCGTCTTG TAAATGTTTG GCACTTTGCT	60
ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA	120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC	180
CGCCCGCTAT TTCTATATTC AGGCAGTGGG TACATCAGGG AATAAATTCA CATCTTCTCC	240
AGGCGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG	300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTATAGTA AGATACCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG	CCGCGTCGAC	TCTAGGTTTT	CTGATTTTGA	TGGTAATATG	GTATTCTGGG	60
AAATATCTGT	CCAAATTATC	CTGATCTCTG	AACTCCTGCT	GTTGAGGTCA	GTCACCTCAC	120
ACAATACCAT	GATGACAGCT	TTATCAAGCC	AGATGCTTAG	TCAGAGCTTT	CCAAGACCCA	180
GCTTTGGTTT	TATCAGCAAA	ATCCATCCTT	CCCACCCCCC	ATACACACGC	CAGTTTGAGA	240
CTCCTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TGGACCTCCT	GTGCAAGAAC	60
ATGAACCATC	TGTGGTTCTT	CCTTCTCCTG	GTGGCAGCTC	CCAGATGGGT	CCTGTCCCAG	120
GTGCAGGTGC	AGCAGTCGGG	CCCTAGACAG	GTGAAGCCTT	CGGAGACCCT	GTCCTTCAGT	180
TGTACTGTCT	CTCTCGGCGC	CATGAATGGT	CATTACTGGA	CCTGGATCCG	GCAGACCCCG	240
GGAGGGAGAC	TGGAGTGGAT	TGGATCTGTC	TATTATAATG	GAAACAGAGT	GTATCACCCC	300
TCCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG	CCGCGTCGAC	AATTACTACC	ATTGTTAAGT	GTCTCTTTAA	CTAAACTCAT	60
TGTTTAAAAG	TTTTCTCCCT	CTCTGTTTCT	AAATCCAAAT	TTCTGCTCTG	GAATATATGT	120
TAGAAGAGAT	ACATTTGTTG	GAATGTTTGC	ATTTCTTTTA	TGAAATGCAG	TATCTTTTGG	180
GGAATATTAT	GTAAATGAAA	TACCAATTAT	TTAAAAGAG	CATTTTGTG	TGACATAGTG	240
CTTTCACAAA	CTAAACTGG	AATTTCTTTC	TTAGTCTAT	CTATATCTTT	TGAAAATGTT	300
GACACAGCTA	AGAAGAAGCT	GCCTGTTTCT	ATCTTAGATG	GTCTGACCCT	CAGCTACAAG	360
GTATATGCTG	ATATTCCTTG	TATGAACCGT	GTTTTCTGCT	AACATTAAAA	CATGCAAGTA	420
ATTGGTTACT	TTCTAATTTT	GTTTTGTTT	CATAGGTCCC	ATGGCCCGTG	GACATTGTTA	480
TAAGTTTGGA	ATGTCAAAAA	ATTTATAATC	AAGTGTTTCT	TCTCTATTG	CAAATAAAGT	540
GGGCATCCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG CCGCGTCGAC TTTATTTTCAG TGGATTCTCT AGGATTTTCT ATATAAAAGA	60
TGTCATCTGA TAGAGTAGTT TACTTCTTCG TTTCCAACCT GAATGGCTTT TATTTTCATCT	120
CTTTCCTAAC TGTCTGGCT AGAACCTCCT TTACCACGTT GAATGGAAGT GGCAAGAATG	180
AACATCCTTG TCTGTTTCT GATTTTCGAG	209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG CCGCGTCGAC AATGGCTTTT CTTCTTCTCT GGGTTTGTGT ACTAGTTGGT	60
TCCTTTTCTG CTTCTTAGC AGGGACTTCC AATCTCTCAG AGACAGAGCC CCCTCTGTGG	120
AAGGAGAGTC CTGGTCAGCT CAGTGACTAC AGGGTGGAGA ACAGCATGTA CATTATTAAT	180
CCCTGGGTAT ACCTTGAGAG AATGGGGATG TATAAAATCA TATTGAATCA GACAGCCAGG	240
TATTTTGCAA AATTGCAACC AGATAATGAA CAGAATATTT TATGGGGGTT GCCTCTGCAG	300
TATGGCTGGC AATATAGGAC AGGCAGATTA GCTGATCCAA CCCGAAGGAC AAAGTGTGGC	360
TATGAATCTG GAGATCATAT GTGCATCTCT GTGGACAGTT GGTGGGCTGA TTTGAATTAT	420
TTTCTGTCTT CATTACCCTT TCTTGCTGCG GTTGATTCTG GTGTAATGGG GATATCATCA	480
GACCAAGTCA GGCTTTTGCC CCCACCCAAG AATGAGAGGC TCGAG	525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC TTCATGGCCT AGGCTCCTAA AATAAATAAT CCACATAATT GTAAATGAAA	60
CACATCAAGG ATTTGAGTTA ATAGCCTCTG AGCAGCATTA ATATAGCCAT TAGACTGGAG	120
TATTTGTTAT CAAGAGGGCC AGAGAACCCA CCGCTAAAGC CGTAGGGTGG GAGGAACCTT	180
GGATTGCAGC TACATGGCTT ATGTAGGGAG TTTGTAACAG CCCCAAGCTG AAACCAGCTT	240
CTACACCCAT GACTGTTGAG TGATTGAATT CTAGACCTGC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGCGG	CCGCGTCGAC	CAACAAGAGC	ACTGGCCAAG	TCAGCTTCTT	CTGAGAGAGT	60
CTCTAGAAGA	CATGATGCTA	CACTCAGCTT	TGGGTCTCTG	CCTCTTACTC	GTCAAGATTT	120
CTTCCAACCT	TGCCATTGCA	ATAAAAAAGG	AAAAGAGGCC	TCCTCAGACA	CTCTCAAGAG	180
GATGGGGAGA	TGACATCACT	TGGGTACAAA	CTTATGAAGA	AGGTCTCTTT	TATGCTCAAA	240
AAAGTAAGAA	GCCATTAAATG	GTTATTTCATC	ACCTGGAGGA	TTGTCAATAC	TCTCAAGCAC	300
TAAAGAAAGT	ATTGCCCCAA	AATGAAGAAA	TACAAGAAAT	GGCTCAGAAT	AAGTTCATCA	360
TGCTAAACCT	TATGCATGAA	ACCACTGATA	AGAATTTATC	ACCTGATGGG	CAATATGTGC	420
CTAGAATCAT	GTTTGTAGAC	CCTTCTTTAA	CAGTTAGAGC	TGACATAGCT	GGAAGATACT	480
CTAACAGATT	GTACACATAT	GAGCCTCGGG	ATTTACCCCT	ATTGATAGAA	AACATGAAGA	540
AAGCATTAG	ACTTATTCAG	TCAGAACTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGCGG	CCGCGTCGAC	TGAAAAGTAG	GTTTTTGAAG	AGATATATTC	GAAATATATT	60
TTTTCACCTG	AAAAAAGTAA	AAATTTTITT	CAAAAGCAAA	TAATTCAACT	CTAAAATTAT	120
ACTATTTCAA	CATTCTCATT	TATGTGAAAG	CATGTGATAA	ATTGTTGCTG	CGTCAGAGAT	180
ATGAGAAACT	CCTTGCATT	AGGTGGGCAT	TATTCATAGA	CTTCTACATG	AAAGAGAAGA	240
GAAATAAAAG	ATGCACCAGG	ATTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGCGG	CCGCGTCGAA	CCCAGCAAAA	TGGGGATCTC	CACAGTCATC	CTTGAAATGT	60
GTCTTTTATG	GGGACAAGTT	CTATCTACAG	GTGGGTGGAT	CCCAAGGACT	ACAGACTACG	120
CTTCACTGAT	TCCCTCGGAG	GTGCCCTTGG	ATACAACGTG	AGCAGAAGGT	TCTCCATTTC	180
CCTCGGAGTT	GACCCTGGAG	TCAACTGTAG	CAGAAGGTTT	TCCGATTTC	TTGGAGTCAA	240
CCCTGGAGTC	AACTGTAGCA	GAAGGTTCTC	TGATTCCCTC	AGAGTCAACC	CTGGAGTCAA	300
CTGTAGCAGA	AGGATCTGAT	TCTGGTTTGG	CCCTGAGGCT	GGTGAATGGA	GATGGCAGGT	360
GTCAGGGCCG	AGTGGAGATC	CTATACCGAG	GCTCCTGGGG	CACCGTGTGT	GATGACAGCT	420
GGGACACCAA	TGATGCCAAC	GTGGTCTGTA	GGCAGCTGGG	TTGTGGCTGG	GCCATGTCAG	480
CTCCAGGAAA	TGCCTGGTTT	GGCCAGGGCT	CAGGACCCAT	TGCCCTGGAT	GATGTGCGCT	540
GCTCAGGACA	CGAATCCTAC	CTGTGGAGCT	GCCCCACAA	TGGCTGGCTC	TCCATAACT	600
GTGGCCATGG	TGAAGATGCT	GGTGTATCT	GCTCAGCTGC	CCAGCCTCAG	TCAACACTCA	660
GGCCAGAAAG	TTGGCCTGTC	AGGATATCAC	CACCTGTACC	CACTAGACTC	GAG	713

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 925 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```
GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTCTC      240
TGGTCAGCAT GGTTTAAATT TCTTTCCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCTCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAAG TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTC CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAACTGA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925
```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```
GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTGGCC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172
```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```
GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGTAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATTG CAGAATCCAG AACCAGTGAT      120
TTGTAAGTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCAGT TGGATGGCAG AGCCTGGCAT      300
```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCAAGAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CCTGTTTATT TGACTAAAGT GAAGTTCATG TGGCTTGAGC 480
CTCGTTTCCT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCACG CCCAGCTGAA GGTCACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTGCCCA GCACCTTCTG GTGTCATGTC 720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGGG AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC 180
TGAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC 240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCCCTT 300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAT TTTCACAACC TCCAACAGAA TAGACAGAGA 360
AAAACCTCTG GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTTCTTTG AACTTGAGGT 420
GGTGATCCTC CCAATGATT TCTCAGGCT GATCAAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTGTTC TCTCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCAGGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCACTGCAA TGAACATAAC ATGCAAGAAA TGACAGAAT GTGGTCCAGA 180
ATTGCCCCT GGTGTCTGT GCCCTGGTG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC 240
TTTCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGA GCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTGCGT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCTC CCAATCTC ACCCTCTCAC 540
CACGCCCCC GAG 553

```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTGAACTCA AACTTGAAATG TAAATATGGA TATGAACAGT ATTAAGAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAAACTC CAGCAAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTCAACAGC CAGTCCTCCA GGTTC AATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTCGTCC CTGGTGAGCC ATGGAAAGGT TATCCAAACA TTGACCCCTGA AACTGACCCT      540
TACGTCACTC CTGGCAGTGT CATAAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCAAGCT GCCTTCAACT      660
AGTGCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCGCCACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT AAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAAATGTAT CTTTTTTTTT TTAAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTGGGA ACAGAAATGA ATTAATGATT      300
TTTTTGTATA ATATCCAACA TGTCCTACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACATTAG GACAAAGTAT CTGGTTAAAA TGCTGTTTCA TTAATAAAG      420
CCCACTCTCC TTACTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGGT GGAGTGCAGT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTGTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTAACCT ACCAAATTCT GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

```

GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG      120
CATAATTGGA GCATTTCAT TAATCAACAA ACTCACATTG AGACAAAAC TAGTTTTACA      180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC      240
TTTGGAAGT AGTTACTTGG AACTTGTAA AGGTATTACA TTTTATATT TAAACACCTA      300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA      360
TCTGTCTTTT GTGAAACATT TTGAAATAT GTATATATAA TATTGTATAT GCAAATTGTG      420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTTAT ATTTCTGATA ACTTGTTTTG      480
CATATGACCG GCACTTCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGGGAAGGCGA AGAAAAGAAT AGAGAAGATA      60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA      120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT      180
TCTAGACCTG CCTCGAG                                         197

```

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTTGTGAG AAGCCTGGAC      60
AAGAGGACGA GGTGCACACC ATGTCAGTCA CGGATTTGTG AACTCACAGG AGAGGGTTGG      120
ATAGGGCGTG TGAACGTGAG CCCGCGGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG      180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT      240
GCAATGTAGA CGATGCGAAG TCGTGGTAA GGGTGGGCTT GTGACGGCAC CCGCTGCTTG      300
CAGCCTAACT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT      60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTTTCTA      120

```



```

ATTTTTCCT AACCTTTGAT TTGGTATTTA ATTTTGTAGTT GTCAGAAGTT TTTAATATTT 180
GTATCATCAA AGCTATCAGG TTATTAAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT 240
GAAGGTCGAG 250

```

(2) INFORMATION FOR SEQ ID NO:1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

```

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120
CTTGTGAATT AACATCCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180
ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTTTACTAA AGTCATCGAG ATCTGGGTTT 240
AAATGACACT TCATGCTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

```

GAATTCGGCC TTCATGGCCT AGTTTTTGTG TGTGTTGTTG TTTGTTTTTT GGCAAGAACA 60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120
GGATATAGAT CACTATTTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180
ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTTT TCTGAAAGAT GGGAGAAATT 240
TTACATACT TAAATTTGAT GGGATAAGCC ATGCATTAT AGGCATTAG TCAATATATA 300
TTTCACAAAT GAATGAAGAT AAATTAGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360
AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60
GTATAAGGGA CTGCTCCCG AGGATAAAAC ATTGAGAGAA ATAAAGTGA CCAGTGGGGC 120
CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTA GCAGTAAACA CACCCAAAGA 180
TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT CGAGGCAGAA 240
ACAACACAGG AAAGTGTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

```

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60
ACATGGTTGT TTGTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT 180
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTA ATGTATTTGA TATGCTAGTT 240
ATTGTGTGCG ATTTAACTT TTTTGTCTT CTCCCTNTT TTGGTGTGTC GCTTCTTTT 300
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAAATGCAG 360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTTAACAAAA GAAATAGATA TTTAAAAATT 420
AATACTAACT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT 60
TAATTTGGAG TGGCCCCTGG AGTCAGTTTC CTACACCATC CGAGGCCCCA CCCAGCACGA 120
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240
GAGCAACTCA CCACCAGCCT TGGGCCCAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTAGGA GCCCTGGAAA 360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA 420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCCGCAT CGTGTGGCCC TGAGTGTTC 480
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540
TGCTCTGCCC GCATCCGCCG CGTCTCTGTC ACACGTTGCC CTGCAGGTCC ACCCCCCTG 600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCCT CTTACGGGGT 720
TCGGCAGGAT GGGGACCCTG CTTTCTCTA CTTGCTGTCA GTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```

GAATTCGGCC AAAGAGGCCT AGTCTCTTTG AAGATCTCTA GGAACCTTGCT TTATGAATCT    60
TCATGCTCCT GTGTTGGATG CATATACATT TAGGATAGTT AGGTGTTCTT TTGAATTGA    120
AACTTTTACC ATTATGTAAT GCCCTTGTTT GTCTTTTAAA ATTTTGTGTG GTTAAATATC    180
TGTTTTGTCT AAAATTAGAA TTTCAGCCTC TGCTTTTTTT CTGTTTTCCA TTGCTTAAT    240
AAATTTTCT TCATTCCCTT ATTTTTCAGC TATGGGTGTC ATTGGATGTG AGATTCATCT    300
CTTGAACACT GTACTACTGG TTCTTGCTTT TTTACTCAGC TTGTCACCTC GTGCTCTTCA    360
ATTGGGCATT CAAGGCTAGT GTTGATATGT GTGAATTGT TTCTGTCATC ATGTTATTAG    420
TTGTTTATTA TGCTGACTTG TTTGTGTGGT TTCNTTATAG TGTTACTGGT CTGTGCACTT    480
AAGTGTGTTT TTTAGTAGC AATATTTCT TTTCATATGT AGTGCTTTAT GCGAGGTATT    540
TTGCAAGGAT TTTCTGAATN NTCNGAATTT TTATGTGGGC TAAACTAGGG GCTCGAG    597

```

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```

GAATTCGGCC AAAGAGGCCT AGCCTCCCAG TGTGAGCCAC CGCAGCCAGC CTGGATTGTT    60
GAATTCAATG CTTGGGTCAC CTCCAGATTC ATTTTCACAG TCCTTCATGT TTTGGTCATA    120
TGACATTGTA TTTTGTCTGC ATATGACTGA TCTTTTTTTG TTAAATGTGA GATACTTGTT    180
AAAAAATGTT TAGCAATGAA TTGAGGCCTA GTAGCATGTT ATCTGTCTGC AGAAGAGATG    240
GGAGTCTACT TCTGGGGGAT GGTGAGGGGT CCTCCATACA GGCTGCAATT GAAGTCGTCG    300
GTGCAGGCTC AGTCCCTACA AAGGCCAGGG TATTTCTCTG CCACCTTTAT TCTGATGCAT    360
GACTCTTCTG GGTCTCAACC AGAGCCAGTG GACTTCAGTA TGGGTCGCTT TCATTGGCAG    420
ACCCCTCAATC CACTTGTTTT CCATCTAATC CACTCGAG    459

```

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```

GAATTCGGCC AAAGAGGCCT AATGGATCTC ATGTGCAAGA AAATGAAGCA CCTGTGGTTC    60
TTCTCCTGTC TGGTGGCGGC TCCAGATGG GTCTGTCCC AGCTGCAGCT GCGGGAGTCG    120
GGCCCAGGAC TGGTGAAGCC TTCGGAGACC CTGTCCCTCA CCTGCTCTGT CTCTGGTGGC    180
TCCATCAGCA GCAATAGTTA CTCCTGGGGC TGGATCCGCC AGCCCCAGG GAAGGGGCTG    240
GAATGCATTG GGAGCATCTC TTACAGTGGG AGCACCTACC TCACCCGTC CCTCAAGAGT    300
CGAGTCACCG TTTCCGTAGA CCCGTCCAAG AACCAGTTAT CCCTGAGGCT GAGCTCTGTG    360
ACCGCCGAG ACACGGCTGT GTATTATTGT GCGGGGGGGT CTCGGGCGA TTATTCCTAT    420
GAGAATAGTG ATTACCCGGA CCCCCGTAC TATTAGACT CCTGGGGCCG GGAACCCCTG    480
GTCACCGTCT CCTCAGCTTC CACCAAGGGC CCATCCGTCT TCCCCCTCGA G    531

```

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 661 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```
GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTACTTTACC ATTTTGTGTT 60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT 120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT 180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT 240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC 300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTGTAGT 360
TTTGTAGCTA TTGGCATTTC AGTAGCATT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA 420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA 480
GTTATTCAGG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATTT TGTGGGTAC 540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTTCTA CCGTATATG 600
CTTACCGCTG GACTTACTGC CTTTGCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA 660
G 661
```

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```
GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAAA ATGGACCCAA 60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG 117
```

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```
GAATTCGCGG CCGCGTCGAC CTTAAATTTA AACTGGCCT GGTTCGCTT TTTTATCAAG 60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG 118
```

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG	CCGCGTCGAC	ATTTTATATA	ATATTTTAAA	TAAGTTTGTG	TACAAAACAA	60
AGATTTGACT	GCATTTTGAT	TGTGACCCCG	TTGCATGAAG	TCAGGTGTGG	AGTTTCCAC	120
TTGTGGTATC	ATGTTGCTGC	TGCTCAAGAA	GTTTCTGATT	TTGGAACATT	TTGGATTTTG	180
GATTTTCACA	TTGGGGATAC	CTAATGTGAG	AGAGACTAGG	CCACTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG	CCGCGTCGAC	GTTGGGGACA	TGGTGGGTCT	GAGAAAAGTG	TTGCCCACAA	60
CTTTCTATCT	GGCATTCCCT	GCGGAGGAAA	TAGAATGCGC	GCTCTCCGAC	AGCATTTCCT	120
GTAACATCCG	CGAACTCGAG					140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG	CCGCGTCGAC	TCTCAGAAGA	GGTTTGTTA	ACTTCTATAA	ATACAACCAC	60
TTCATGCGTT	GGCATCTCCT	TGAGAAAAGG	CTTCTCGAG			99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAGTG	CTGTGGAGTA	GTATATTTCA	CTGACTGGTT	60
GGAAATGACA	GAGATGGACT	GGCCCCCAGA	TTCCTGCTGT	GTTAGAGAAT	TCCCAGGATG	120
TTCCAAACAG	GCCCACCAGG	AAGATCTCAG	TGACCTTTAT	CAAGAGGGTT	GTGGGAAGAA	180
AATGTATTCC	TTTTTGAGAG	GAACCAAACA	ACTGCAGGTG	CTGAGGTTTC	TGGGAATCTC	240
CATTGGGGTG	ACACAAATCC	TGGCCATGAT	TCTCACCATT	ACTCTGCTCT	GGGCTCTGTA	300
TTATGATAGA	AGGGAGCCTG	GGACAGACCA	AATGATGTCC	TTGAAGAATG	ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCATTTGG TGATCAGGAC TGAACAGAGA 60
GAACTACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120
CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180
AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240
CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300
TACTACGGAG ACTCCGTGAG GGGCCGATTG ACCATCTCCA GAGACAATTC CAAGAACATG 360
TTGTATTTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420
AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480
TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60
TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120
CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTCAATT CTGTTACAGT 180
GTTTTGATCT TTAGTATTTC TTTTTCATTG TTCATTACAC TTTCTCTCTG CTAACATGTC 240
CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AAATTCCTAA 300
TCTGATAATT CAACATCTCT GACATGCTG GTTCTGGTTC TGATACTTGT TGCAAACTG 360
TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGT TTTTTTTTGG 420
ATAGTTGGAC ATGACGTACT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480
GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540
CCCATTATG CTTAGTGTTC TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600
TACTGCTAAA GGTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC AAAGAGGCCT ACTCAAGTTC AAGGAAAATG AAGACAAAAA GTGATATGAT      60
GGAAGAAAAC ATAGATACAA GTGCCCAAGC AGTTGCTGAA ACCAAGCAAG AAGCAGTTGT      120
TGAAGAAGAC TACAATGAAA ATGCTAAAAA TGGAGAAGCC AAAATTACAG AGGCACCAGC      180
TTCTGAAAAA GAAATTGTGG AAGTAAAAGA AGAAAATATT GAAGATGCCA CAGAAAAGGG      240
AGGAGAAAAG AAAGAAGCAG TGGCAGCAGA AGTAAAAAAT GAAGAAGAAG ATCAGAAAGA      300
AGATGAAGAA GATCAAAACG AAGAGAAAGG GGAAGCTGGA AAAGAAGACA AAGATGAAAA      360
AGGGGAAGAA GATGGAAGAG AGGATAAAAA TGGAAATGAG AAAGGAGAAG ATGCAAAAAGA      420
GAAAGAAGAT GGAAAAAAAG GTGAAGACGG AAAAGGAAAT GGAGAAGATG GAAAAGAGAA      480
AGGAGAAGAT GAAAAAGAGG AAGAAGACAG AAAAGAAACA GGAGATGGAA AAGAGAATGA      540
AGATGGAAAA GAGAAGGGAG ATAAAAAAGA GGGGAAAGAT GTAAAAGTCA AAGAAGATGA      600
AAAAGAGAGA GAAGATGGAA AAGAAGATGA AGGTGGAAAT GAGGAAGAAG CTGGAAGAAGA      660
GAAAGAAGAT TTAAAGAAG AGGAAGAAGG AAAGCTCGAG      700

```

(2) INFORMATION FOR SEQ ID NO:1386:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGCGG CCGCGTCGAC CTTTAGTGTG TCTTTTCATT CTCTAAAAAG TGCCTTTGC      60
AGAGAAAAAA AAAATTTTAA TTTTGATGAA ATCCAACCTA TCAATTTTTC TTCTGTGGCC      120
CCTCGAG      127

```

(2) INFORMATION FOR SEQ ID NO:1387:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGCGG CCGCGTCGAC CTCTGTTTCTG TCGTTTTGCT.GAATATTTAT TAGCATTCCA      60
TCACTTTGTG TTTAATTAAT AGAAGTTGAG TTCAAACAAT GTTTTAAAAA TTCACACAAA      120
TACTCGAG      128

```

(2) INFORMATION FOR SEQ ID NO:1388:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 816 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC AAAGAGGCCT AGTTTCTTTT GCTCTACATC TTCACCAGTA TTTGGTGTTA      60

```

```

TCAGTGTCT GAATTTTGTG CATTCTGATA GGTGTGTAGA GGTATCTTAT AATTTTAATT 120
TGTGTTTCTC TGATGCCATA TGATGTGTGG GACATCTTTT CATATGCTGA ATTGCCATCT 180
GTATACTTTT GGTGAGGTGT CTGTTAAGGT TGTGGCCAA TTTTTTAATT GGGTTGTTTG 240
TTTTCTGTG GAATTTTAAG AGTTCCTTAC ACTGTCTCTG TCTGTCTTGT CTGTCTGTCT 300
GTCTGTCTGT NGAGACAGAG CCTCGCTCTG TCACCCAGGT TGCAGTACAG TGGCACAGTC 360
TTGGCTCCCT GCAACCTCTG CCACCTGGGT TCAAGTGATT CTCCTGCGTC AGCCTCCCGA 420
GTAGCTGGGT TTATACCCGT GCACCACCAC ACCTGGCTAA TTTTGTATT TTTAGTAGAC 480
ACGGGGTTTC ACTANGTTAG CCAGGCTGGT CTCGACCTCC TGACCTCAGG TGATCCACCC 540
ACCTTGGCCT CCCAAAGTGC TGGGANGNGA GCCACCACAC CCAGCCTCCT TACACATTTT 600
AGTTAATAGT TCTTTATCAG ATGTGTCTTA TGTAAATATT TCCTCCCTAT CTGTGGCTTG 660
TCTTTTCATA CTCTTGACAT TGTCTTTGCG AAAAGACAAC AATTTTAAAG AAACAAGTAG 720
ACAATTTTAA TGAAGTCTGG CTTATCAGTT CTTTCTTCA TGGTTGGTAC CTTTGGTGCC 780
GTATCTAAAA GTCATCACCA AACCAAGAA CTCGAG 816

```

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TAGACGAACT ATATGTTTAA 60
GCAAAAACAA AAATAAAAT CCTCAAAAAA AGTAATATCA GAGTTTAAAT TTCAACCAGC 120
TGGCACAACA ATGAAAGTGT CAGACTTTCT GAAAGTACTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAAACCCTCA AAAATAAATT AGAATCCAGC ACTGCTACAA 60
TATATTATCT AAAATGTCTA ATTCTCAAAA ATATGAGTGA TGCAAAGAAA CAGGAAACAG 120
TGAAACACAG AGGAAAAAAC AGTGACTAGA AACTGACTTA AGAGTAAGCC CAGATGTATT 180
TGGGAGCCAG AGCCTTCAAA GTAGCTATTA AATATGTTTCG AAAAAATTAA GGGAAAATAT 240
GACAATGACT CAAAAATAAG GACTCTAAAT ATAGAAATGG GAGCTG 286

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:


```

GAATTCGGCC TTCATGGCCT ACTTTAAGG GCTTGAAGT TTCAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCACTGCTG TTGGGTGGC CGCTGGTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GCGTTCACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGGAAATATCG      240
CATAATGTCT CATCTGTTTT ATCTCTTGCT ACAAACATCA CAATCTCAA ATAACAATGG      300
CAGTACAAC TCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTT GCCTAAGTCT      360
TCCCATCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGGTGATT CAGAATCCAG GCCTGGTGTG      120
CCTTCCACAG TACCAAAGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CCTTGACAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCGCCCCTT CTTCCTTTTG CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCT CAAATCTAAC GTTTTAGGAA TTTTATTATC      60
CTGCAGAGAG TTGGGGAGCT GTTTAAAGT TGGTTGGTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTCTCAT GATAGCTTAA      180
ACTGTGTGAT GGCCAAGTCC CCACCTTGAA GATGTCCAAA TTCAGCCTCA GACATTTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCCCTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGGTCTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC      120

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AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT      180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT      240
CCCCGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGA TGGCCAGAGT TACCTGCTGC      300
TGATCCGAGA TGAAGGAGGC CCCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCAGTGG      360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTCCAGAC GGTGTACAAC TACTTCCTGC      420
GTCTCTGCAG CTTCGCAAC ACCCCTCGAG      450

```

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACGTCATTG ATTGCAGGGA CCATCAAACC CCAGACAATC      60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC      120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG      180
ACTACCAAGC CAAAACCTT CAAAACAAG GACCATGGTA TGTCAAGGAA GGTGCTTCC      240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG      276

```

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA      60
ACTCTTGAA AACTAAATAG TTAAATCT CATCCAATT CCACCTAACT TACATGCCTG      120
GTTAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA      180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA      240
G      241

```

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT      60
TGTGATCGTG GGGGCGATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT      120
GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA      180
TATCTCCATC CGCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG      240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCTGGT TGTTCCTTAG CTTGGGAGAC 300
 CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60
 TGAAGACACC TTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120
 AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAGGGTT 180
 GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAAGTT 240
 ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
 AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
 AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
 AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTATAGTA 180
 GAGAAGGGGT TTCGTCATGT TGTCAGGCTG GTCTCTCACT CCTGAACTCA GGTGATCCGC 240
 CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
 CTTGAGTTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
 GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
 AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
 TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
 ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600
 ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCATTTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

```

TTATTAACCT ATCACAATTG AATTTT TTTT TAATTTTCAG TCTTAACACA TTTT TTTAAAA 120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATTC CAAG 180
TACTGTGGTT CTACTGTTTA GTGGAAACT CTGGAAGTTA AAATATAGAA TATGAAACCT 240
CGAG 244

```

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

```

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA 60
AAGAAGCCAC AGAAATGTTT AAAA ACTTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA 120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGT CACAT GAGGAAGTAG CTGTCAGATG 180
TCACATAATT ACTTT CGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAA 240
TCAAATTGTC CTATTGTGAC TCTTCTAAA ATGAAGATGA AGAGCTATTT AATGACACAC 300
CTTGATTAA AACGGGAAAC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGT ATTTCCTGT TAGTGACATG 60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG 120
TTCCTTTAGC CTACTTCCTG CAGCTTCAA TTTATCCAAG GAAATGTCTA CAACAATTTT 180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT 240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCGCGC CTTTCTCTTC CATCACACCA 300
TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT 360
CGAG 364

```

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

```

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC 60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG 120
GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGTCTT 180

```

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTTGC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCTCTTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTTAT 120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTTGTCTAT TTTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240
TAATTCGTGT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTG TGTCTTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAA CAATGTAGTT TGAGTGTGTG TGCGTGCCTG 120
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAAAAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60
GCCTGAAGTT TGCAGTGCAA TGCAGTAAGT ATTTACCGAG TGATTCTAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTCG TTTTGGAAGA TACCTTTCCC	240
CCAGTTATTT TCATTTCACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCCTCTTTGC	300
TTTCTGTCT CAATTTTCCT GCCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:1407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC	60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA	120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCATCG CAAGACAGTT	180
TCACTGTATT TAAGCGAGAT CTGCCCTCG TACACGATCA CCGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAAGAATG TAGGCAGGCT CCCAAATGGA	60
GAGGTAAACA TGACCGCGTT GTTTGAAACT ACTTCATTAA TTTGTAAATC AGAACCAAAA	120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCTCCTCCC CACTTACGGA TAAACAGACT	180
TTAACTTCCC TAACCCAGAA ACACCTCCAC CAAAAATGTA TGGTTATACC TTATCCTAAA	240
AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA	300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAA CCCCAGAGG ACTGGTGACA	360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC	420
TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTGG GGACAAGGAA AGGAGACACT	480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG	512

(2) INFORMATION FOR SEQ ID NO:1409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT	60
TTATCTCTTT CATTTTGAGT AAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCATCT	120
AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTATATTA CTTATTATTC TTTTAATGTC	180

TGTGGGGTCT AGTGATGTCT CCTCTTTTCTAG TTCTGATATT GGTAATTTGT GTCTTCTCTC 240
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
GGCCCTGGAT GCTAAGGCTG CAGTTTCTTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
CAGCCTCCAA GACACAGTGT GCTGACCTGG TTTTGTATAA AGATGAAAAC AGCTGTTCTC 180
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTGAGGAAA 300
AATAGAAGCA CGAATTCACC CTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATT CACTCATATA TGTCTCCAAA 120
TTTATATATT AATTCATATA CTGTTTGTGTC TTACATTAAT CTAGCATTGT CTTTGGCTT 180
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTTGCCT CTTAAGTTTT GCCATCCCCA 300
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTTGTC TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

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AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTTAATGTGG CTTTTTAATG    180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG    240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TAAAAAATAA    300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTAT    360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT    420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCTCA    480
GAGAGTAGCA GCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA    60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAAC    120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT    180
TACTGTAAC    TCATGAAAGA CTACTAACAA TACTGGCTAT CATTATTAA TATTAGTAG    240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTAGTCT TCGTGTGTAC    300
TACCGTTATC TTCACTTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG    360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATTCCCAT GGACTAAGCT TGGAGAAGTA    420
AGAACTATTA CTACTCGAG                                         439

```

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA    60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTTCTT TATTAATTCC TCAAGTACAG    120
ACTTTGTAT GTAACCAAGT TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA    180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC    240
GAG                                         243

```

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:


```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTTGTTTTT    60
CTGTATCAGT AATTCATTCT GTATATTTTA AAAAGTTTTA ACCTCTTCTT CCTAGCCCTC    120
CAGTATTTGT TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA    180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTCAAT    240
ACATTTGATG AATTTTTTTT GTTTTTTCCT CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTAGCTTG CATCCAGCTG TTTCTTGAGT    60
GATGTGTACA GCTTACCCCC AAAGAGGCAA CTGAATTTCA GCTGCTCTAA TACCCACACC    120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC    180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTCATTGGA ATGTTACTTT    240
CAGATCTCAC AAACCTCAAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAAATAGAT    300
AAATCCTTTG CCAGGTCTTC AAGCTTTCCA CTCCCTCGA G                                341

```

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTA AAAAGT AGGATTGCTA CCCGCCATTA    60
CTATTAAAAA GTAGGATTGC TACCCGCCAT TATTATTAAA AAGTAGGATT GGTACCCGCC    120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC    180
CTCCATTATT ATTA AAAAGT AGGATTGCTA CCCTCCATTA TTATTAAAAA GTAGGATTGC    240
TACCTGCCAT TATTATTAAA AAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA    300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTA AAAAGT    360
AGGATTGCTA CCCGCCATTA TTATTAAAAA GTAGGACTGC TACCCGCCGT TATTTCACA    420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG                                455

```

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

```

GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA    60

```

```

ACCAGCCTCC TGTTCCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT 120
CCTGCTCTGA TCCCTGTACC CAGCTTGTCC CTGCAAGCA TGTTCCCCTC CCTTGCCCAG 180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC 240
ATGTGTGGCT GCCCTCACC TGGGTGTCCT CTTCCTGTGC CCAGCTCTGA CAQCCACGCA 300
TGTGGGGCTG CCCCGTGCCT AGGTGTCCCC TCCTCTGCTC AGGCTCTGTC CTCTGCGGT 360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC 420
CTCCCCCATC CACTGCTGGT GCAGATGCTT CCTTACGGGG CCTTGTCTGA TGGCTTTAGG 480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGAAGGGGAA 540
GCGGGTGGTA AAATTGGTTC ACAAGCCCTC GAG 573

```

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AACTATTTA ATTTTTTAAT TTATTTTGG 60
TTGTTTTTTG CACAATGAAG TTTGAGCTTC TCAACCTTCT CCCCTACCCA GGGCTGTGGA 120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCCTCCTC ACCCTCTTCC CCCTCCGGGC 180
ACCTCGAG 188

```

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC 60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCCACAGAA AAGAAGGACC 120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTTCAAA TGATGCTCAG AGTTTTGATT 180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG 240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT 300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAAATTGTC ACAAAGCGC TGGATTACG 360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCCTC GTTTCCTGGG 420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTTAGATGA TCCAGATCCT GATGATGGAT 480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGTT TAAAATGGCA GACAAGGATG 540
GAGACCTCAT TGCCACCAAG GAGGGTCTCG AG 572

```

(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

```

GCAAGACGGC TACTGAGGCA GGAGAATCGC TTGAACCCAG GAAGCGGAGG TTGCAATGTG      60
CCAAGATCGT GCCACTGCAC ACTCTAGCCT GGGCAACAGA GCAAGACTGT GTCTCAAAAA      120
AAAAAAATCT TNGACNAAAC ATAGTTGTTN ACATACTTCT TTAATCCCAG AGTTAGTTTT      180
AAAAANNACA TGATTGCTGT TTTTGCATAT TATCTCAGCG GTCTAAAATT AACCTAGCCA      240
TGTGCAGGAA TGGGTAAAGT CCCCTTAAAC AAAAAAGGGG TTAGTTANGT TAGTTCCTTT      300
GCCATTTCAC TGGTCATATA CCTGAAGCGC TTAGCCTGAC ACAATTGAAC GCCAGACGGA      360
AGCCGNGATC AGCGGTCTCTG ACGGGGTCTCA GAGTCAGACC AGGGGTCTTT TACCCAAGTG      420
GGGAAGATTG GGAAAGGCCT AGGATCAGAG AGGGAATGG GTCCCTGGTT GCCCATGGAC      480
CTAATGGGGT CTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

```

GAATTCGCGG CCGCGTCGAC GAGGAAACCA GCCAAGGACT AACTACGACC ATGAGATTGG      60
CAGTGATTGG CTTTGGCCTG TTTGGCATGG CCTCCTCCCT CCCGGTGAAA GTGACTGATT      120
CTGGCAGCTC AGAGGAGAAG CTTTACAGCC TGCACCCAGA TCCTATAGCC ACATGGCTGG      180
TGCCTGACCC ATCTCAGAAG CAGAATCTCC TTGCGCCACA GAATGCTGTG TCCTCTGAAG      240
AAAAGGATGA CTTTAAGCAA GAAACTCTTC CAAGCAATTC CAATGAAAGC CATGACCACA      300
TGGACGACGA TGATGACGAT GATGATGACG ATGGAGACCA TGCAGAGAGC GAGGATTCTG      360
TGGACTCGGA TGAATCTGAC GAATCTCACC ATTCCGATGA GTCTGATGAG ACCGTCACCTG      420
CTAGTACACA AGCAGACACT TTCACTCCAA TCGTCCCTAC AGTCGATGTC CCCAACGGCC      480
GAGGTGATAG CTGGGCTTAT GGACTGAGGT CAAAGCTAG GAGTTTCCAG GTTCTGATG      540
AACAGTATCC TGATGCCACA GATGAGGACC TCACCTCTCA CATGAAGAGC GGTGAGTCTA      600
AGGAGTCCCT CGATGTCATC CCTGTTGCCC AGCTTCTGAG CATGCCCTCT GATCAGGACA      660
ACAACGGAAG GGGCAGCCAT GAGTCAAGTC AGCTGGATGA ACCAAGTCTG GAAACACACA      720
GACTTGAGCA TTCCAAGAG AGCCAGGAGA GTGCCGATCA GTCGGATGTG ATCGATAGTC      780
AAGCAAGTTC CAAAGCCAGC CTGGAACATC AGAGCCACGG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

```

GAATTCGCGG CCGCGTCGAC GGGAGAGGAA GGGTTGGGCA GGATGGAATA TTAAATTGTA      60
ACATGATAAA CATGCAAGAC TGTTATCCAA TCTAGATAAT TTATATACAT TTTGATGACT      120
TAGGAAAACA AAGCAATCAT TTGTGACAAG CCTAAAAAGC TTGACATATT TAACATACTT      180
AGGAACTTTT TTTGTGCGGT GGGAAATTCT TAATTGTATC ATGTGGGCTT TTTGAAAGTA      240
ACAAACAGAA GGCCAGTCTG TTGCAAGTTT GCTGCTGAAC ATCACAATTCC ACCCTAAGAA      300
AACACAAGGT GGATTGCATC GAGGGTGGAT ACCTTACCTT AGCACAGA

```

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTCTC	60
TTTAACTGG CTTGTTTACT TATTTCTTCA CCAAAGCCAG GGAACGTCCC TTAGCTACT	120
GCAGCATTTC TAACAGATGC GACAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCCAG CTCATCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCAGTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTCT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTGG	TTATCTTGAC	TTTTTAAAT	AACATATTC	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTTGCAC	120
ATTATTATGG	AGCATCATTA	ATGGTTTGTA	CATTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTGTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGGTCCTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAGCA	TGCAAGTGCG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCGTGGACT	GCAAAACAAG	CCCGGCTCAA	CAGTCAAGGC	TTTGGGTGTG	360
CCTGGCTCTC	CAAGTTCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTT	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTGTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATA	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```

GAATTCGGCG CCGCGTCGAC GCTGTTTCATG AGGAGACTTA ACCACAATTC AAAGTGTAGC      60
AGTTGTGTAT TTTAGCATTG TAATATTTGA TTGAGGCCCT GAGGTGTTAA TATCTCAATC      120
TCAGAGTTAG ATGTTTCATGT CCTTTTGA TTTTAAAC ATTTTTCATA ATTTTTTTTT      180
TAAGTTAGGG AGCACATTGA GTGAAGTTCT CTGTGTAGAA CAATACCTTC TGCTCTGCTT      240
CTCCAGCTT TCACTGAGGG CTGGAAAAGG ACAGGCCTGT CCAGCTGTAC TGTCCTGCTG      300
TGTATGGGGA AGCTCAGGCT CTGGTGAAG CAGGGGGCAT GGATGTCAA CAACTGATGT      360
GCAAACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```

GAATTCGGCC TTCATGGCCT ACTACTGATG AGAACATTAT CTGCATATGC CAAAAAATTT      60
TAAGCAAATG AAAGCTACCA ATTTAAAGTT ACGGAATCTA CCATTTTAAA GTTAATGCT      120
TGTCAGCTA TAACCACAAA AATAATGAAT TGATGAGAAA TACAATGAAG AGGCAATGTC      180
CATCTCAAAA TACTGCTTTT ACAAAGCAG AATAAAGCG AAAAGAAATG AAAATGTTAC      240
ACTACATTAA TCCTGGAATA AAAGAAGCCG AAATAAATGA GAGATGAGTT GGGATCAAGT      300
GGATTGAGGA GGCTGTGCTG TGTGCCAATG TTTCGTTTGC CTCAGACAGG TATCTCTTCG      360
TTATCAGAAG AGTTGCTTCA TTTTCTCTGG GAGCAGAAAA CAGCAGGCAG CTGTTAACAG      420
ATAAGTTTAA CTTCATCTG CAGTATTGCA TGTTAGGGAT AAGTGCTTAT TTTTAAGAGC      480
TGTGGAGTTC TTAAATATCA ACCATGGCAC TTTCTCCTGA CCCCTTCCCT AGGGGATTTT      540
AGGATTGAGA AATTTTCC TCGAGCCTTT TTAATAATGT AGGACTTGTT CCTGTGGGCT      600
TCAGTGATGG GATAGTACAC TTTTCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

```

GAATTCGGCC TTCATGGCCT ACTAATTTCC AAGAGCTAAA CTTTATACCG CCTGCAATAT      60
TTCCATTTAC TACCAGTTTT TTTCTGACCT AGTCAGATAT AAGAAGCCCC CTTACTGGAT      120
ACAAGACAGT TAATTATCAG ATCCAGTCTG ATCCTAGATC CAGTCTGATC CTAGACCCAG      180
TCCAGTTTCT GTTGTGACTT CCAAAACCCAG TTTGGATCAG AAATTTGCTC AAAGAAACTA      240
GGAGAGCTCA AAACACAAAT ATGTGGAGCT TCTGAATCTG AGAGAGAACG AACTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

```

GCGTGGTTTC ACCTTGTGG CCAGGCTAGT CTTGAACTCC TGACCTCAGG TGATCCACCC      60
ACCTCGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCATCTG ACTGGTGCAC      120
TTTACTTTGA CCTGTCATAA ATCCCTTGGT TTGTTATTAC TAGTTTTTAC TTTAGACAGC      180
AATTATCTTT CAAGGAAAAA TTAAAAGGA AAAAATGTCT TATATTTACC CTCATGTTTA      240
CCATTCCCAG TGCTCTTTAT TTCTTTATGT CAATCCGGAT TTCAATTGT TATCATACTG      300
TTTCTGCCTG AATAACAGTT TAACAGCAAC TCGAG                                335
  
```

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

```

GAATTCGGCC TTCATGGCCT AATGCTCTGT GTCACTGTCT CCCGGTGCTC AGCACAGACA      60
AGTTCGAAGAC AGATTTTAT GATCAATGCA ACGACGTGGG GCTCATGGCC TACCTCGGCA      120
CCATCACCAA AACGTGCAAC ACCATGAACC AGTTTGTGAA CAAGTTCAAT GTCCTCTACG      180
ACCGACAAGG CATCGGCAGG AGAATGCGCG GGCTCTTTT CTGATGAGGG TACTTGAAGG      240
GCTGATGGAC AGGGGTCAGG CAACTATCCC AAAGGGGAGG GCACTACACT TCCTTGAGAG      300
AAACCACTGT CTCGAG                                316
  
```

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```

GAATTCTAGA CCTCCACCC TGTAGAACAT TCTCCTCACT TAGGAGATAG TCATATTTTC      60
AGGCTGCCTT TGAAACTGTG GGTACACAAA CAGCAGAGCG ATCTATTTCA GCAGTTGAAG      120
TTGTATTTGA GCCATTATTT CTTCCTCTCT CTTTTTGGTT GAGTTTCTAG GAAGGAAAGG      180
GCTGAACTCC ATGACTGCTC ATATTACAGT GCTAAGTCCT CACAGCCATC CACTGTTTAT      240
ACACAAGAAG AACTAGGCC CACCAAGAGT AAGCGCCTGC CTGAGGTCCG TGAGTGAGTA      300
AGGGCCAAAG GTGAGGTTGG GATCTGGCCC TTTCTCTTT CTGGCCACCA CAGGGCACTA      360
CCTCCCATAC CCACACTC GAG                                383
  
```

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCC GTCCCGGGTA	120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA	180
GAATTAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA	240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 228 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTC TGGAATTATT	120
GTGTTATTC TTTGCCAAAT GCATATATCT TCAGGTCCTT TTTTATAAC CATATGCATA	180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTCACCTTT ACTTAGTCTC	120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAGA ATCTTATGCT	240
GAATTAATCA TGAAGCTCCT AAAAGTGTCT GCGGCGCTTT CTATTCCTAC TGACAGCCAG	300
AAGCATCTTG ATGCAATTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC	360
AGCACCTGG AACAAAATGG AAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTGT CTTAACC CGGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTTCTAT	ATGTGCATT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGCTCCGG	CCGCCACTTG	CGCCTCTCCA	GCCTCCGCAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTTCGCG	CTACAAGGAG	AAGATGAAGG	AGCTGTCCGT	120
GCTGTCGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACCAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCCAGAA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGCAGAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GGCGGAGCGG	CGCGAGCACG	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAATA	AATAGCAAAT	TGCATACAGA	TATTTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAAGAC	AGGCATTGGC	ATAAAGTJTT	TATAAATTCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCAATCC	TAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```
GAATTCGGCC TTCATGGCCT AGGCTTCCCT GTTCCCTCAG CCCAGTCGA GAGGAAAGAG      60
AATCGGGCCA CTGCCAGAAA GAGAGTCAAG CAAACCTGGA AGGGCAAATC TGAGAGTGGG      120
AAGGCCAAAG GCCGAGGCCC AGATTTAGTA TTCACTAGCA GCGCCTTCGG GTAGCAGGAT      180
GATTCCCTTTT CCTGCCTGTC TGCTGCTGGC TCTCTTCCCT AAGGTACAGG TTGGCAGGAC      240
CACCTCCGCC TACTTCTCCA CCATCCCTAG CATGCCAGCC CGTTCACAGA TCAACCTGCC      300
AGTGGAGTCA GGCAGTGCAC TCCTGGAGCC AAGAGGGAAG GGCAGGGTAG AGAGGGTATG      360
TCCAGTAGCC TGGAGCTCCA TGGTGGCTTC ATGCCTCCCT TCTCCAGCT CAGGTGGCCC      420
TGAGGGCTCC CTCGGAACAG TGCTCAAAT CCTGACCCAA GGGCCAGCAT GGGGAAGAGA      480
TGGTTGCAGG CAAATGCAC TTTATAGAGA TTTTCTATTG CTGGGAAGGT GTGTTTCTCC      540
CACAAATTTGT TTGTGAATAT TCACTTGTTC TATAAATGTC TGACCTGTCC G          591
```

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT ACCTGCCTCG AGCTCCTGTC CTTAGGTGAT      60
CTGCCCCGCT TGGCCTCCCA AAGTGCTGGG ATTATAGGAG TGAGCCACCT GGCCACGTA      120
GCTTTTAAAG TTCTGCCAGC ATAGCCCCGG GATGGGGTGG GGGTAGACAG GGCCTTAGGA      180
CTTTTCATTT TAAATGCTC ACTCCACAGT GAAGAAACAG GTGATGACTA TCCTGAATAT      240
TTGGGAAGCT GTGTCCTAGA ATTTTGGCC TCAGTTCCAG AACCCACAGC TTCTTTACAA      300
CATGCTTCAA GCCTGGGACT GAGCTGCCAG TAAATAAACC CCTAGTAACC TTAATATGGG      360
TTAATAAGAT TAGGTGCCCC CTCTGCACGC TCCCCTGCCC CTCCTCGTCC GGGCACCTGT      420
TATGCTAGGC CAGCATGTTT GCAGCTTAGC CAGGGAAAAT CGTGGACCAA GACAGGGCTT      480
TTCATCCACG ACTGGCTAAA AAGATGGCTC TCAATAATAT CTCGAG          526
```

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```
GATTGAATTC TAGACCTACC TCTCTTTTTT TGTGGTCTCT CCTTCATTCT CTGTTTCATTT      60
CTCCGTGAGA TTTTCTGATT AGTAGTTACC TTCAGCATGC CAGTTGACTT GCAAACCTAC      120
AATCCAACCT TTCTTCTACT TTGTCATCTG ACAACAGCCT GGTTTGTAGC TGATTCAGG      180
ACTTCTTCACT TTGGGTGGCC ACTCTCATTA CCACAGAGTT CACTAGTCAT GGTGAACACA      240
CCAGTCTTTT ACACCTCCCT CACTCCCAA CCACTCGAG          279
```

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGGT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGGGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTACTGCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCTCT      420
GAATACTGTG GTTGATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAATAAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAATTGAT TACCCTAAAT      540
ATATCATTAG GATATTATGT TATTTACATC TCTTATGCTA ATTCTAATT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNAAATG AATTGGTCCT CGAG                          644

```

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCGG CGTCCCCCAA CTCTCTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGGCA GGC CGGGTA ACCCGTTGAA CCCCATTCGT      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCCAGT AAGTGCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCCACACT CCCTTTGACC      540
CTGTGTGCCC CTCAGAGGCC AAATTCTTGG GCTCAGGGAC TGGCTTTCGG CCTATTGGTG      600
GTGGAGCTGG GGTCTGGCA AGGAATTTC GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGAATTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAC CTGAG                          756

```

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGGTCACTGG GATCATCTGA ACAGAAGTGC      60
ACAGGCTACT TGTACAGAGA AAAAATTAAT ACTCAAAGGA AATCTTCATT TTTTAGATTG      120
ACTTTGGGAA TTTGAATTTT CATCAGTGCA AATATAAATT TCTCTATCCT GCTCTGAGGC      180
TAATTGGTAC CATATTTTCC CTTTGTGTCT TGTGACTCTG CCACATCCCA TCTCATCCTG      240
GCCTCTGAGT CAAGAACCCA GTGAAGTAC TTTCTAGTTC TAGAAGTTCC GCTGCAAGGC      300
CAGGAAAGCT TGAGAAAGGT ATTGTGGAAG AAGCAAAGGT AGACCCCAT TCACTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT AGGGAAAATA AGTTAATTCT AAATCAAATC TAAATATTAT      60
ACCTCATGCT ATGGTTTTAT TTTATTTTCTG TGCTGCCGTT ACTTTTCCTC CCCAAAGCAA      120
TGTTGTTTCC AGCCACAACC CTCGAG      146

```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GAATTCGGCC TTCATGGCCT ACTTTTCAAA AGCAGCTTTG CTCTACTGAT TTGGGTAAAA      60
GCTTAGTTGC AGTTGGNTTG GGAGGAAATG GGAGCAGAAA ATTTGAGAGA GTGAGTGTAG      120
ACAACTCTTT CAAGGAATTT CGCTATAAAT GGGAGTAGAG ATCTGAAGAC TGAATAATTA      180
GCAAACTGAA AAGTGGGAAG ACGTAATTCT CTTATTATTT CATTTTCTT AGTGAAATAA      240
GAGGTGAAGT TCTCTGAGTA ATAGGAGGGT CAAACAGGNG TTAGAAGTTC ACAAAGAAAG      300
GTCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GAATTCGGCC AAAGAGGCCT AGCATGTTGT GGCTGTTCCA ATCGCTCCTG TTTGTCTTCT      60
GCTTTGGCCC AGGGAATGTA GTTTCACAAA GCAGCTTAAC CCCATTGATG GTGAACGGGA      120
TTCTGGGGGA GTCAGTAACT CTTCCCTGG AGTTTCTGTC AGGAGAGAAG GTCAACTTCA      180
TCACTTGGCT TTTCAATGAA ACATCTCTTG CCTTCATAGT ACCCATGAA ACCAAAAGTC      240
CAGAAATCCA CGTGACTAAT CCGAAACAGG GAAAGCGACT GAACTTCACC CAGTCTACT      300

```

```

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA 360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA 420
TACAAGTTAC CAATCACAGT CAGCTATTTT AGAATATGAC CTGTGAGCTC CATCTGACTT 480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC 540
TCGAG 545

```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTC TCGAAGTGAG 60
GACTGAAGGG AACGAAAACCT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG 120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC 180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCACG 240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAAA 300
TAATATTTCA TACATGAAGG GAACCCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCATT 60
TCTTTGGAAC CTTGAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT 120
CCTTAGTCCT CATGTCACTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA 180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC 240
TGAAAACCTT TGCAGCACTC GAG 263

```

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA 60
TTTGTTTAT TTTATGGTCT TTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG 120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCCC 180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG 240

```

GGTTATATAC CTTACTCCAA TCAAAGATTG AGCTGAGTCA GAACTCTAAG GGAGTTAAGT	300
TTTTGTGTCC TCTGGGGACC AGGGGTCCA ACTAAGACTG TGATATTCAC CAGGATCCAA	360
TTTCCCAGTG CCTCTTGAAC TCTTATTCTT ATCTTTTAA CACATCAAGG CAGCTGGTTT	420
GCATTTTCT TTCTGTTTCT CTTTTAGCT TCATCCTTG CAGCTTTAGA AATTGACAGT	480
TGTCTTACAG GGAAAAGTAG CTGTGTAACA AGCTCATGTC TCTGCCTCTC TTCCACTGAT	540
ATCTTAGCCC CGCAGGAG	558

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGAAATA CAATGATTTT	60
AAAAAAGATT TCCAAAGGCT TTTCCTTTT TTCTTTTTC TNGAGACAGG GTCTCACTCT	120
GTCGCCAGG CTGGAGTGCA GTGACACAAT CTCGGCTCAC GGCAAGCTCC GCACTGCCCC	180
CTCAGGTTC CGCCATTCT CCGCTCAGC CTCCTGAGCA GCCGGGACCA CAGGCACCG	240
CCACCAGCC CAGCCAACTT TTACATTTT AGTAGAGACG GGGCTTCACC ATGTTGGCCA	300
GGATGGTCTC GGTCTCTTCT GCCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTCGGCC AAAGAGGCCT ACTTGATGTC TGTGACCCAC ACNTATTCGC AACTCCCTC	60
CCCTTTTGAA AATCCCTAAT AAAAAGTGC TGGTTTTGC GGCTAGTGGG GCATCATGGA	120
ACCTACTGAC ATGTGATGTC TCCCCGGAT GCCCGGCTT AAAATTCTC TCTTTGTAC	180
TCTGTCCCTT AATTCTCAA GCTGGCCGAT GCTTAGGGAA AATAGAAAAG AACCTAGGTG	240
AATATTGGGG CAGGCTCCCT GATGAAATGA TATATATTCT TAAAATAAAC TTTTCATCTT	300
TGCATATACG TTTATATGCC GAGTTTCTC CAACCTTGTC TTACAGCACT TTGTATACTA	360
CATTCTAGCC ATACTAACT CTTGCAGTTC CTGAGACATG TGCTGTATCC TATTCTTCT	420
GGTCCTTTTC TCATTGATTA ACTACCTGGA GCATACTTTT AATTCAGTGT CAGCGCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCATA CAACCTCCAG TGGGATCAGC ACG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTGGCT TTTTGAAC      180
TCATAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCTCCCA TCCACCAAGT      240
GACATTCTTT TCCAAAAGAC ACATGG                                     266

```

(2) INFORMATION FOR SEQ ID NO:1458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTCAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTTCT GACCAATTAA AAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTACAGC AGTGCTCTCG AG          292

```

(2) INFORMATION FOR SEQ ID NO:1459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATATGA AATTTCCAAT TAAATTATTT CACACAGCAT TTTTCCCCT      120
TAATTTCAAT AGTTTTTTTA TTTCTTGCC GACCCAGGCC AGGAGCTTAG GGAAATGAT      180

```

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCTCCCT CCCCTGCTCA 240
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAACATCT GATCCAGTGA TAGCACGTCA 60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTTCCACT AGCAAATAA TCGTATTAC 120
TTTACTCTC CCATTTTAA TTAATCTTTC CTATTTCATT TCACCCTCTC ATCTCTTCC 180
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCACACT GTTTAATGAA TGTAATTGCA 240
ACCACTCTGC AATTCCTAAG GTTTGTGTTT TTTGCTTTT TCTTTGTAG TCCATCTCTT 300
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
TAGCATTACT GACTTTAAAT TTTTGAGGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAAAGGTT TGGTGGAGAG 180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTTATGCTT 240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCT 300
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
TTTACCTAT TCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
TGGTGAGGGC TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTGCAGATG 180
ACATGATTTC CCAAAGTGTT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTGCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCT AATGTATGGC ATTTGCTTGT 60
TTTTTAAGTT GATTTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60
CTAAAAAAAA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTTCATTG 120
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGTCT AAACATTTCA 180
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTC ACTGCTCTGT TCACATGCCT TATTGAGACT TCTTGTTGGT GTCAATTGCT	120
AGATGGTCTG TTGGAATTAT CTGCTGTCAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGAATCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCCTACAT	180
CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTGCGCAAG	240
TCCAAGCTAC CATACTCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGGCATAAAC CTTCATTCA	120
TAGGTTTCATC AGCTTTTATG ATGAGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTAAGT TTGTGTGCTG	360
CTTAACTTT ATTACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÂCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGTC CTACTCGGGC      180
TTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCT ATGTCCTGAA TCCCACAACA      600
GGCGCACTCG AG

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(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

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GAAAAGCCAA GACTTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTTGGCCCC GATGTTTTTT TTTCATACTC TTCTGTCGCC      180
TCCTCCCAT TCTGCACAGT TCTACCCAC TACTCTCGAG

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(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

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GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAA      60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACTATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTTCAAGTGA CAAAGCCATT CAGCTCGAG

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(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTTGCAA	AAACATCTAT	60
GTTTGTTTTG	TACCTTTTGG	GCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGATACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTTTT	TGCAGATGCT	GAAGGTTACT	TTGCTGCTTG	180
CACAAACAGAT	ACAACTATGA	ATAGTTCTTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTGAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCGGC	300
GGTACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTTGGTC	TGAGATTGG	CCATGGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGTA	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTTG	180
CATTTGACAA	GTGCATGCCT	GGGAGGAGGA	CTCCTCTTAG	TAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAG	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACAG	GCGTATGCCT	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAACAAAG	GCAATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGGCA	240
TCAAAACAAG	AGTAACATGA	AGAAGAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCCA	AATCATGGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTAGCAAGA	ATTCCCGAGC	420
CTGCAGGCAG	CTGGGGATCA	GGAAAAAAA	GAAAAGGAAA	CAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACGTCC	ACCACTCGAG				510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCTT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGGCCAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCCTTGGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTTAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTCGTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTCCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGGATTG	60
CAACTTCCTG	TTGTCTAAAC	GGAACCCCTC	GAACGTAGGA	CTTATAGGGG	AAGCTGTGTG	120
GCATGTCAAA	AAAACACTA	ATCAGAATGA	GCTTTGTCAT	CCAGAGCCAG	AAGTGTGCA	180
GAAATTTTGA	TAATTTTGCA	ACTTCTTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGCTG	CCTTTGTTAG	GCAGATTGAG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC	AAAGAGGCCT	AGAGATTCAG	TTTATTCTAT	ACTCAGACTT	TGGTATCCCC	60
TTAGATGCCC	ATGTCAAAAA	TGAGAAAGTT	GGTGACATGG	TATGGCATT	TATTGCTTTT	120
TGTTTGTTTT	CCATTGCTAC	TTTCACTCAA	ATTCCAAGGA	AATCAGAGAA	GAAGGGCTTT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGCAAC	AAAATGCATT	CTGTCCAGCA	GTACACTGAA	240
GACAAAAAAT	GTAGTTGAAA	AGTCTCAGGG	AGCGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	AAAGAGGCCT	AATTTGCTTT	GCCAGTAGT	TGGAAGTGA	ACTCGACTCG	60
TGATGGTTCT	CCTGTCATT	TGGTTGATAG	CAGCCGCTCT	GGTAGAGGTT	AGGACTTCAG	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	TGCAAAATAGA	TTTACCAATA	AAGAGATATA	180
GAGAGTATGA	GCTGGTGA	CCAGTCAGCA	CAAACTAGA	AGGACGCTAT	CTCTCCATA	240
CTCTTTCTGC	GAGTCACAAA	AAGAGGTCAG	CGAGGGACGT	GTCTTCCAAC	CCTGAGCAGT	300
TGTTCTTTAA	CATCACGGCA	TTTGGAAAAG	ATTTTCATCT	GCGACTAAAG	CCCAACACTC	360
AACTAGTAGC	TCCTGGGGCT	GTGTGGAGT	GGCATGAGAC	ATCTCTGGTG	CCTGGGAATA	420
TAACCGATCC	CATTAACAAC	CATCAACCAG	GAAGTGCTAC	GTATAGAATC	CGGAAAACAG	480
AGCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC	AAAGAGGCCT	AATTCATTCA	GTCGTCATGA	GTTGAGTGCT	TACTACATGC	60
AAGGCACTCT	GCTAGTTATA	TTCTAATAAT	GCAGAGATAA	TTAGACATGG	TTCCCGCCCT	120
CAAGAAGCTC	ACAAAAGTAT	TCAGGAAATA	ATGCAGACTA	GTGATTTTGC	TATAAAATTA	180
TTTTTGAAGG	AAGCAGACAC	AGCAGTATTT	ACCTGTAGGT	GGAGCAAGTA	ATAAGCCATG	240
CTGTGCAATA	TATACATAAA	GCTTCTGCTT	CTCATGGGAA	TTAGTTACA	GTGCTTGGAA	300
TGAGAAGGGG	AAGGAAAGAA	TTAACAAATG	CCAAGATTTC	TGGAGCAGAT	TGTACAGCTG	360
TGACTTTGGA	AAACAGAAAAG	TAAGACCCTC	AGAAAACCAA	TGAAGTCTAA	GAGAAATAAA	420
ATTTAGTGGA	CAGGTATGAA	AAGTGTAAAT	GCGCCTAACT	ACCAGATGGA	GACCTTCAGA	480
ATGGGCTATC	CTTAGAGTCT	AGTACATCAA	GAGACCCCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGGCTGTTT CTACTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AACTGAACT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAATGAA NACGCTCATT TTATAAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC	60
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AGTGTGCGCTC	CCACACAACA	TGCAAACCCT	CCTGCCGAGC	TGCGACCTTC	GCCTGTCACG	120
GAACCTGGTG	CTGAGTGTGG	TGAGAGTGAA	TCCTGCAGCA	CGTGGCGCAC	TGTCGGCCTC	180
TTTCATGTTT	AGCTTTTGAT	TGTGCTTATT	GTCCATTGT	ATTTCTTCTT	CTAAGTGTCT	240
GTTCAAGACT	TTTCCGTCTT	GGCTGGAGGT	GGGAGGTGCC	TGCTCCTGTG	TTTTCTGGCA	300
TCTTTCTCTG	CTGTCTTTGT	GTGTCTGCAC	TCAGGGAGTT	TCCCTGGGGT	GTGTGCCTAG	360
AGAGGTGCTG	GTGTACATT	TCAACGTAGG	GACAGATTCC	CAGCGTGTCT	TTAAAGGAGC	420
TGTGCCGCTG	TGTGCTCACT	TGACTCGCCG	GCGTTCTTGT	TTCTCCAGGC	CTCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTCGGCC	AAAGAGGCCT	ACACACTGCA	AGAACAGAGC	CAAGAACCTA	CCATGTACCC	60
TTTACTTGGA	TTTATCATT	CTGTTTGTGA	CATTTGCTTT	ATCATTCTTG	TTATATTAC	120
ATATAGTTCC	TTCCCCTTGG	ATTATTTGAG	AACAACTGC	AGAACTCACA	CCTCTTTCCC	180
CGAAGAACTA	GGCATTAGCA	CATTACAAGA	ATACGATGAT	AGAGATCAGA	AGTTAAATGC	240
TGATGAGATA	TTCTGTCTA	ATCCACGAAC	CTTATTTCT	TGTCATCAGT	TGTCCCAACA	300
GCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC	AAAGATTGCT	GTCCTTCAAC	GTGTTTCTTA	TGAAGTTATT	AGTAATACTT	60
TTGTTTTCTG	GACTTATAAC	TGGTTTTAGA	AGTGACTCTT	CCTCTAGTTT	GCCACCTAAG	120
TTACTACTAG	TATCCTTTGA	TGGCTTCAGA	GCTGATTATC	TGAAGAACTA	TGAATTTCTT	180
CATCTCCAGA	ATTTTATCAA	AGAAGGTGTT	TTGGTAGAGC	ATGTTAAAAA	TGTTTTTATC	240
ACAAAAACAT	TTCCAAACCA	CTACAGTATT	GTGACAGGCT	TGTATGAAGA	AAGCCATGGC	300
ATTGTGGCTA	ATTCCATGTA	TGATGCAGTC	ACAAAGAAAC	ACTTTTCTGA	CTCTAATGAC	360
AAGGATCCTT	TTTGGTGGAA	TGAGGCAGTA	CCTATTTGGG	TGACCAATCA	GCTTCAGGAA	420
AACAGATCAA	GTGCTGCTGC	TATGTGGCCT	GGTACTGATG	TACCCATTCA	GGATACCATC	480
TCTTCCTATT	TTATGAATTA	CAACTCCTCA	GTGTCATTTG	AGGAAAGACT	AAATAATATT	540
ACTATGTGGC	TAAACAATTC	GAACCCACCA	GTCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTGTAG	CCAGGGCATC	TTCCAATAT	GAATTATTAA	240
GCCTTAACTT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTGTG	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTTAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTGT	CCATTGCTG	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAACTAA	ATGTGTTCTC	ACTTCTGATA	ATGTATGTCA	240
ATTTAAATTT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCACTG	CTTCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAAGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAAA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAAAA	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```

GAATTCGGCC AAAGAGGCCT AGTGCAACTA CAGATAAGTA AACTTCGACT GGGTTTAGTA      60
ACACCTGTCT TTAATATTTG TCAGTGTACC TACATTGATA ACATTGACCT TTGGAAAAAT      120
TGGACTTGTA TTGTGTTATT TCTCTAGCAT ATTAGTCCTA AAAAAGTGTG AGTAATAGGA      180
GATGGAGAGG TGTTTGTTGA TTGTCAATTCT GTGGTTCCTA CAGCATTCAA GTTGCCTCCG      240
TACGCTCGAG

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(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT AATTCTTAGA AATAAGCCA CTATCATGCA GGTTATTTAC      60
AAGTAAAAAC ATGGAGTCAG CCCAGTAGAG AAACGTTCAA ATAGTGTGGC TCCTGCTCTG      120
CCACGTTCTG TTTATGACTT TGGATATTTT ATTTATCCTT TCTGGGGTAG TTTTCAACT      180
TTAAGGTCCT AATAAACTTT TAGATTTTAT GACCTGTCCT CTTTAGCCCT GTAAGATTTA      240
AATATTATAA AGAACCTGAT TTCAAAGACA CTGGTAAACT TGGACAACCA AACAAGTCCA      300
AGTATGGTAC TTATTTGTGT GTGTGCATAT ATTAACCTTA TGCATATGCT GTTTTCACAC      360
CTATTAAAC TGTTTTTGAA AAACGTATAT ATCAGTTTTT GGAAAACAGA AGAAGATTTT      420
AAACGGCTAC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCGATTGAAT ACATGTTCAA TAAGGACAAT GGACAGGCAC CTTTACCAT CACTCCTGTG      60
TTTTAGATT TTCCAGTCCA TGGGATGGAG CCCATGAACA ATGCCACCAA AGGCTGTGAC      120
GAGTCTGTGG ATGAGGTCAC AGCACCATGT AGCTGCCAAG ACTGCTCTAT TGTCTGTGGC      180
CCCAAGCCCC AGCCCCCACC TCCTCCTGCT CCCTGGACGA TCCTTGGCTT GGACGCCATG      240
TATGTCATCA TGTGGATCAC CTACATGGCG TTTTGTCTTG TGTTTTTTGG AGCATTTTTT      300
GCAGTGTGGT GCTACAGAAA ACGGTATTTT GTCTCCGAGT AACTCCCAT CGATCTCGAG      360

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(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCTGTA GTCCCTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTCCTTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                     271

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(2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGA ATCTCATTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTGTTTGA CTAAGGGTCT CAGTTCTTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA      300
CAAATCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTA GATTGTCTGC CCTCCTCTT CCTCTTCTT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                     138

```

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTACGCC AG                                     102

```

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```
GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCA CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG
```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG
```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTTCNTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCCC GACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	AAAGAGGCCT	ACAAAGACCA	AGGTATCACA	TTCTGCCATT	AGCTGTACC	60
TCTCCCTTCC	CCATTTTCAG	ACAGATTGAG	CCCCTTTTT	GTGTCCTCCT	CTGCTCTTAA	120
GCTGTTTCTC	ATCGTGGGTG	CTCAGCAACT	TGTCTGCTCT	CACTCTAGTT	TCTATTGCT	180
TCCCTGAAAT	TAGCCTTTAA	CTATGCCCAG	ACAAGCCAGA	GCCTGCCTA	AACTTCTAAT	240
TCCTCTGTGC	TTCTTAGTGT	ATCCTTTCTG	CCTGCTTGCC	TGCCTGCCTT	CCTGCCTGCT	300
TGCCTGCCTT	ACTGACCCTT	TGCCCCACGC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC	AAAGAGGCCT	AAACCGTCGA	TTGAATTCTA	GACCAGCCTC	ATCTCCTGTT	60
CCTCTCTCCC	TCCCACTAT	GTTGGCCTCC	CTGCTGCTCC	TCGAG		105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 701 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC	AAAGAGGCCT	ACTGTGAACC	TAAACTCCT	ATAAGAAAA	GTAAAGTCTT	60
AAAAACAAAC	AAATACACAG	CAACAATCTT	ATTTTCCCCA	GCCTGTCTTA	TGTTAGGGTG	120
CAGATGTGAT	TTCTGTGTGG	CTAATCAGAT	GCCCTTGTGT	GAGAGACTGA	TTTGAACAGA	180
GGCAGGGGCA	TCCATCTTTC	TAGTGTGAGT	CACAGCAGAA	GCACTGAGGT	CCTGGTGTCT	240
GTCGCTGCAG	TGGTGGCTTT	TGATACAGGA	GTTCCCTGAT	GGCAGTAGCT	TCTTTGTGGG	300
TTCAGTTCTG	TTGTGTGGTT	CTGCAAGTTC	AGCTTAGAGT	CTGTTTCTTC	AGCTGTTTCA	360
ATGACCCTCT	GAGCTGTCTA	CCATGAAAA	TTCTATCCTG	CTTACACTAA	TTAGAGCCAA	420
TCCTGTTATT	TACAAATGAA	TATCCTGACC	AGTAATGAAG	GTCTAGACTT	AACTGTAATA	480
TTTTATGACT	TAAATTGTTG	GCATATGTGA	AAACTTTTTG	TTTATTCTAA	ACTTTTTTGT	540
TGTTGTTGTA	AAATAAAACA	TTTATGAAAA	GCGCACCAAA	AAGGATAACA	AATGAGAGTA	600
ATGCAACATA	CAGGCACCAG	CAACTCAGGC	CAGGGAGATG	ATATATGAGC	ATCCCCAATC	660
TCCCCTTTAC	ACTCCCTCAA	ATAACTCAAT	CAAGACTCGA	G		701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

```
GAATTCGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GTCATCTCA CAAGTTTCCT    60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGTCCTCTG CCTGAAAGTA GTTGCCAAGT    120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG    180
CCAGATTTT TTTTAACAAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT    240
ATGGGGGAGA ACTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

```
GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA    60
GTTTCTGTCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTTCTTTTT    120
TTTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTTCAG ATAAGAACAC    180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTTCCTCT CTGTAGATGA    240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG                                         277
```

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

```
GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC    60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAATG AAAGCAGAGG    120
AATGGTGGCA GGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT    180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGGTCACAT TGCTAGATGT CAGAGCAGAA    240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAAAC ATTCAATTCA    300
GTTAGTGTTC ATTGAACACC TATTGTGTTT TGGCCCTCGA G                                         341
```

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGGTTTC	GGGTCTCCC	TGGCAAGGGG	TCCAGGGCC	180
TGGAGCCCGA	GGCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTTAG	TGGGAAGCTC	240
CAGGCCTGC	CCCTCCCCGG	GGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCACTGGA	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCTGT	GGCCAAGGGG	GCTGTAAACC	CTTCAACCCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCACTGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCTT	GCGAGGGCCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTTAGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGTTTA	TATTTCACTG	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGTTGGG	GGGTAACCTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAATTT	CATGCAAATG	AGGAGTGCCA	GCACTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TTACTGATTT	AAAAACAAAA	CAAAAAAAA	TAAAAAAGTT	300
GTGCCTGAAA	TGAATCTTGT	TTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCCT	GGTGTAGCTT	CTGTTCAACT	TTATATCACG	GGAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTTA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTGTATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTACT	GATTTTGTAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```
GAATTCGGCC TTCATGGCCT AATGAGGTTT TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCAGTTGC TTGCCCCGCA      240
CTTACCTCCT CTTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCCCTGCTT      420
CCTTACAGTT TTACTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTCAGCCAC      480
CACACTCGAG                                         490
```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```
GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCTC CTCCCCTCCA CTCACGCTCC      60
TCCCAATCCC CAAGGTCTCT TCATTCCCAC CTCCTCCCTC TCCTCTCCTC ACGCTCCTCC      120
CTATCCCCGA GCTCCTCTCT CATCCCTACC CTCCTCCCTC CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CCTTCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG                                         313
```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```
GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCTC TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GCGCGGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAAA TGTTACGTG GGAGCCTGTC CACATGGGCT GTACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGTTGGA AGGGTCACCT CGAG      354
```

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCGG AGTCTGTTCC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGGAAGAGT GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTT CCCTTCATTG AAAACCACCA CCGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTGT ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTGATTT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCCTTGCCCG      420
AA

```

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTGTAG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCATT      420
TAGAATTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480

```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

```

GAATTCGGCC AAAGAGGCCT AGGCACAGAA GGGTGGTGAG TGTGATCAAA TCTAGTCTCA      60
CTCCCACTTT TTAGTCTCAC TCCTACTTTT GTCCACCACC CAGGCACGGA GAGAAAGGAA      120
TGTTTAGCAC AAGACACAGC GGAGCTCGGG ATTGGCTAAA CTCCCATAGT ATTTATGGTG      180
GCCGCCGGCG GGGGCCCCAG CCCAGCTTGC AGGCCACCTC TAGCTTTCTT CCTACCCCAT      240
TCCCGGCTTC CCTCCTCCTC CCCTGCAGCC TGGTTAGGTG GATACCTGCC CTGACATGTG      300
AGGCAAGCTA AGGCCTGGAG GGTGAGATGG GAGACCAGGT CCAAGGGAG CAAGACCTCG      360
CGAAGCGCAG CAGCCCCGGC CTTAGGCCTC TTTGGCCGAA      400

```

(2) INFORMATION FOR SEQ ID NO:1516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

```

GAATTCGGCG CCGCGTCGAC GTCGACGCGG CCGCGAATTC GGCCAAAGAG GCCTACCCAT      60
GTCAATCAAG ATGGGTGATT ATGAAATGCC AGACTTCTAA AATAAATGTT TTGGAATTCA      120
ATGGGTAAAT AAATGCTGGC TCGAG      145

```

(2) INFORMATION FOR SEQ ID NO:1517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

```

GCTGGACCTC CTGTGCAAGA ACATGAAACA GCTGTGGTTC TTCCTTCTCC TGGTGGCAGC      60
TCCCAGATCG GTTCTGTCCC AGGTGCAGCT GCGGGAGTCG GGCCCAGGAC TGGTGAAGCC      120
TTCGGAGACC CTGTCCCTCA CCTGCACTGT CTCTGGTACT TCCGTCAGAA GTGTTAGTTA      180
CGACTGGAGT TGGCTCCGGC AGTCCCCGGG GAAGGGACTG GAGTGGCTTG GAGAGATTGA      240
TTACAGGGGG AGAGGCAATT ACAACCCGTC CCTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:1518:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGTTTT TGTGGTGGCG CTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGLATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTACTGATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AAAGTGTACC TGTCCCAACC AGCCAAACTG GAAAAACCTC AGGATTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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